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FATS AND OILS Situation

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Table 1.--U.S. Fats and Oils Situation at a Glance

Item	Unit	Marketing year total or average		1969		1970			
		1968-69	1969-70 Preliminary	September	October	July	August	September	October
SOYBEANS (Year beg. Sept.)									
U.S. average price received by farmers	$ bu.	2.43	2.35	2.28	2.23	2.72	2.65	2.66	2.77
U.S. support price	$ bu.	2.50	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Price, No. 1 yellow, Illinois points	$ bu.	2.54	2.53	2.41	2.30	2.80	2.75	2.75	2.90
Price, No. 2 yellow, f.o.b., Gulf	$ bu.	2.72	2.74	2.58	2.52	3.03	2.96	2.96	3.07
Price, No. 2 yellow, f.o.b., Baltimore	$ bu.	2.66	2.76	---	2.51	3.05	2.98	2.99	3.08
Receipts at mills	Mil. bu.	609.7	742.6	48.2	154.9	40.5	32.5	50.3	132.3
Crushings	Mil. bu.	605.9	737.4	47.5	61.8	62.7	62.0	53.3	67.4
Oil yield per bushel crushed	Lb.	10.61	10.65	10.77	10.68	10.61	10.58	10.57	10.79
Meal yield per bushel crushed	Lb.	47.43	47.35	47.71	47.11	47.57	47.58	47.74	47.19
Stocks at mills, end of month	Mil. bu.	28.2	33.4	28.8	121.9	62.9	33.4	30.4	95.3
Exports	Mil. bu.	286.8	428.7	13.3	52.5	25.2	29.0	29.6	N.A.
SOYBEAN OIL (Year beg. Oct.)									
Production	Mil. lb.	6,530.8	7,904.2	511.8	660.3	664.7	655.6	563.8	727.5
Domestic disappearance	Mil. lb.	5,756.3	6,328.2	547.5	548.6	525.6	478.3	522.4	N.A.
Exports	Mil. lb.	869.6	1,419.1	96.9	55.2	151.4	143.2	166.3	N.A.
Stocks, end of month	Mil. lb.	415.4	543.4	415.4	470.7	638.3	670.6	543.4	N.A.
Price, crude, Decatur	¢ lb.	8.2	11.0	9.7	10.6	11.5	11.6	12.1	14.0
SOYBEAN MEAL (Year beg. Oct.)									
Production	Thou. ton	14,580.7	17,592.3	1,134.0	1,456.4	1,490.4	1,474.5	1,273.0	1,590.6
Domestic disappearance	Thou. ton	11,469.0	13,510.4	966.7	1,157.9	1,127.8	1,136.6	1,056.1	N.A.
Exports	Thou. ton	3,044.4	4,035.4	185.2	290.2	407.1	289.0	282.9	N.A.
Stocks at mills, end of month	Thou. ton	156.8	136.6	156.8	159.1	164.3	207.0	137.0	169.0
Price, 44% protein, bulk, Decatur	$ ton	74.10	78.40	72.70	75.40	82.90	84.00	81.20	77.25
Price, 49-50% protein, bulk, Decatur	$ ton	82.50	86.60	82.70	82.10	92.50	92.50	88.20	83.75
COTTONSEED (Year beg. Aug.)									
U.S. average price received by farmers	$ ton	50.50	41.10	37.80	40.20	---	50.00	51.10	56.00
U.S. support price, basis grade	$ ton	48.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00
Receipts at mills	Thou. ton	4,461.8	3,846.3	209.7	1,507.7	9.7	59.9	210.6	1,016.9
Crushings	Thou. ton	4,363.3	3,925.2	160.9	478.9	99.5	83.8	97.6	409.0
Stocks at mills, end of month	Thou. ton	159.3	80.4	267.0	1,295.8	80.4	66.5	179.5	787.3
COTTONSEED OIL (Year beg. Aug.)									
Production	Mil. lb.	1,424.6	1,281.9	51.0	156.3	33.1	26.6	30.5	131.9
Domestic disappearance	Mil. lb.	1,016.9	1,070.3	87.4	110.8	53.9	73.3	48.9	N.A.
Exports	Mil. lb.	131.9	434.8	4.7	48.4	17.5	8.9	17.8	N.A.
Stocks, end of month	Mil. lb.	439.7	213.9	376.8	373.8	213.9	158.1	121.8	N.A.
Price, crude, Valley	¢ lb.	11.6	12.0	9.9	10.2	14.2	13.6	12.5	13.6
COMMERCIAL LARD (Year beg. Oct.)									
Production	Mil. lb.	1,941.0	1,810.4	163.0	178.0	140.0	143.5	166.4	N.A.
Domestic disappearance	Mil. lb.	1,698.7	1,401.8	133.0	144.2	93.9	118.3	125.6	N.A.
Exports	Mil. lb.	222.9	349.3	21.7	30.0	38.0	37.2	27.9	N.A.
Shipments to U.S. Territories	Mil. lb.	58.6	55.3	7.5	1.3	6.5	.3	7.4	N.A.
Stocks, end of month	Mil. lb.	55.8	59.7	55.8	58.3	66.5	54.2	59.7	N.A.
Price, loose, tanks, Chicago	¢ lb.	8.4	11.6	10.1	11.6	10.9	11.5	11.5	N.A.
CREAMERY BUTTER (Year beg. Oct.)									
Production	Mil. lb.	1,132.8	1,121.3	67.7	76.7	92.5	81.1	72.8	N.A.
Domestic disappearance	Mil. lb.	1,139.5	1,093.2	98.2	107.0	74.8	85.1	100.7	N.A.
Stocks, end of month, total	Mil. lb.	155.3	171.3	155.3	125.2	203.5	199.2	171.3	N.A.
Stocks, end of month, CCC	Mil. lb.	121.4	145.1	121.4	97.9	166.6	161.3	145.1	N.A.
Price, 92-score, Chicago	¢ lb.	67.5	68.9	69.9	68.2	69.8	69.8	70.5	70.1
FLAXSEED (Year beg. July)									
U.S. average price received by farmers	$ bu.	2.81	2.65	2.57	2.64	2.56	2.46	2.36	2.31
U.S. support price, farm basis	$ bu.	2.90	2.75	2.75	2.75	2.50	2.50	2.50	2.50
Price, No. 1, Minneapolis	$ bu.	3.09	2.90	2.69	2.77	2.83	2.65	2.64	2.60
Receipts at mills	Thou. bu.	14,338	15,945	3,520	2,244	1,097	2,108	2,712	1,807
Crushings	Thou. bu.	14,400	14,448	1,957	1,536	861	1,456	1,807	N.A.
Exports	Thou. bu.	9,736	5,731	1,118	2,672	1,076	---	180	N.A.
Stocks at mills, end of month	Thou. bu.	1,245	2,743	3,968	4,678	2,979	3,631	4,537	4,808
LINSEED OIL (Year beg. July)									
Production	Mil. lb.	299.8	292.5	39.5	31.2	17.5	29.1	36.2	30.8
Domestic disappearance	Mil. lb.	275.0	251.7	32.7	14.4	32.0	21.8	20.4	N.A.
Exports	Mil. lb.	77.0	43.0	1.1	4.9	1.3	3.1	2.7	N.A.
Stocks, end of month	Mil. lb.	131.4	128.7	118.8	130.7	112.8	117.1	130.1	N.A.
Price, raw, Minneapolis	¢ lb.	12.1	11.9	11.9	11.9	11.0	11.0	10.0	N.A.
INEDIBLE TALLOW & GREASE (Year beg. Oct.)									
Production	Mil. lb.	4,601.0	4,830.1	383.2	432.9	410.6	389.5	419.1	N.A.
Domestic disappearance	Mil. lb.	2,669.9	2,721.0	228.9	266.9	211.3	252.8	230.6	N.A.
Exports	Mil. lb.	2,007.3	2,049.7	141.2	139.2	186.0	145.8	145.5	N.A.
Stocks, end of month	Mil. lb.	303.6	368.6	303.6	330.8	333.7	325.0	368.6	N.A.
Price, bleachable fancy, Chicago	¢ lb.	6.2	7.9	8.2	7.7	8.6	8.7	8.2	8.8
COCONUT OIL (Calendar year's 1969 and 1970)									
Production	Mil. lb.	386.4	N.A.	35.8	38.2	N.A.	N.A.	N.A.	N.A.
Imports	Mil. lb.	428.6	N.A.	18.4	28.7	47.6	46.9	27.0	N.A.
Domestic disappearance	Mil. lb.	833.3	N.A.	62.0	45.8	N.A.	N.A.	N.A.	N.A.
Stocks, end of month	Mil. lb.	60.4	N.A.	131.4	152.2	114.0	123.8	145.5	N.A.
Price, crude, Pacific Coast	¢ lb.	13.6	N.A.	13.6	14.0	16.2	15.9	16.5	16.2
PALM OIL (Calendar year's 1969 and 1970)									
Imports	Mil. lb.	159.6	N.A.	5.6	22.0	13.5	6.8	6.2	N.A.
Domestic disappearance	Mil. lb.	153.1	N.A.	12.8	10.1	7.7	16.6	13.1	N.A.
Stocks, end of month	Mil. lb.	35.0	N.A.	28.3	40.2	36.4	26.5	19.6	N.A.
Price, Congo, tanks, New York	¢ lb.	11.2	N.A.	11.2	11.2	14.0	14.0	14.0	13.2
PEANUTS (Year beg. Aug.)									
U.S. average price received by farmers	¢ lb.	11.9	12.2	12.1	12.4	---	12.2	12.9	13.2
U.S. support price - Farmers' stock basis	¢ lb.	12.01	12.38	12.38	12.38	12.38	12.75	12.75	12.75
Millings, all types, Farmers' stock basis	Mil. lb.	2,275.0	2,267.9	182.9	350.4	15.7	75.5	234.2	N.A.
Production of shelled edibles	Mil. lb.	1,252.0	1,284.8	114.6	208.5	10.0	50.9	147.5	N.A.
Total edible uses - shelled basis	Mil. lb.	1,031.7	1,060.6	99.3	105.4	77.3	94.5	97.2	N.A.
Crushings - shelled basis	Mil. lb.	491.4	437.1	17.3	33.0	25.0	13.2	16.1	36.2
Commercial stocks, end of month - FS	Mil. lb.	356.7	352.7	1,293.7	1,762.5	352.7	559.3	1,767.8	N.A.
CCC stocks, end of month - FS	Mil. lb.	---	---	279.1	327.1	---	52.6	367.2	N.A.
PEANUT OIL (Year beg. Aug.)									
Production	Mil. lb.	205.2	182.0	7.2	13.7	10.5	5.5	6.7	14.9
Domestic disappearance	Mil. lb.	180.3	154.5	12.1	11.9	15.9	13.5	12.3	N.A.
Exports	Mil. lb.	25.6	35.7	1.0	1.1	2.4	.1	.1	N.A.
Stocks, end of month	Mil. lb.	33.7	25.3	17.1	17.7	25.3	17.3	11.6	N.A.
Price, crude, Southeast mills	¢ lb.	13.2	14.9	13.5	14.2	15.5	16.0	16.1	16.9

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LITERATURE INDEXING TERMS

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THE FATS AND OILS SITUATION

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SPECIAL ARTICLE

U.S. Soybean Processing Capacity Expanding 27

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SUMMARY

Smaller soybean carryover stocks and a 1970 crop only slightly larger than last year's are reducing 1970/71 soybean supplies 5% to 1,363 million bushels.

Use in 1970/71 likely will expand to approximately 1.3 billion bushels. This would exceed both the record use last year and the 1970 soybean crop.

Thus, carryover next September will likely be drawn down to minimum operating levels and possibly to the smallest volume since the 36 million bushels in 1966.

Reduced soybean supplies and continuing strong demand are boosting prices substantially above the CCC support rate of $2.25 per bushel (No. 1 grade). Prices received by farmers during September-October averaged $2.72 per bushel, 46 cents above the same 2 months in 1969. Soybean prices after harvest likely will remain strong. Favorable prices received for 1970-crop soybeans should encourage farmers to plant more soybeans in 1971.

Soybean crushings for the marketing year that started September 1 may run around 5% above last year's 737 million bushels. The prospective record grind reflects continuing strong demand for soybean oil and meal both domestically and abroad. Most of the price strength this fall is in soybean oil; the October average was 14 cents per pound (crude, Decatur), about 3½ cents above October 1969. Soybean meal prices in October at $77 per ton were about unchanged from last year. Processing margins remain favorable, averaging 45 cents per bushel this September-October compared with about 50 cents the same 2 months in 1969 and 33 cents in 1968.

The soybean oil situation this fall is relatively tight and the 1970/71 season's high for soybean oil prices will likely occur during the October-December quarter. Soybean crushers will be operating near capacity levels and the oil inventory remains relatively low. Domestic use and export requirements continue heavy, providing strength to the market. Soybean oil exports during October-December are expected to be sharply above last year, with most of the increase in commercial sales, including barter. Prices later in the marketing year will be affected by competition from foreign oils such as sunflower, peanut, fish, palm oils and rapeseed. World oil production in 1971 (mainly from 1970 oilseed crops) is expected to expand somewhat, with most of the increase in rapeseed and palm oils.

Foreign demand for soybeans holds strong even though some recovery appears likely in world output of competitive oilseeds and fish meal. U.S. soybean exports this season may increase as much as 5% from last season's 429 million bushels. However, higher U.S. soybean prices may dampen foreign sales enough to hold exports around the 1969/70 record. Soybean processing

capacity has expanded in Western Europe and Asia, requiring increased imports of soybeans. Crushing margins in Europe, which are usually higher than those in the United States, also remain favorable.

Cottonseed oil supplies for the 1970/71 marketing year are estimated at 1.5 billion pounds, a tenth less than a year ago. The 1970 cottonseed crop is up slightly but August 1 carryover stocks of oil were down sharply. Cottonseed oil prices (crude, Valley) have been strong, averaging 13 cents per pound during August-October or about 3 cents above the same months in 1969. Cottonseed crushings and oil production are lagging year-earlier levels, due to the delayed harvest of the crop. Also, prices of the other major fats and oils are generally higher this fall than last. Farmers' prices for 1970-crop cottonseed averaged $52 per ton during August-October, sharply above last year's $38.

Two billion pounds of lard, the estimated supply for the current marketing year, would mean a gain of about 8% from 1969/70. The gain is due to increased hog slaughter as the downtrend in lard yield per animal continues. Domestic use is expected to rise above the 1.4 billion pounds in 1969/70 but exports may decline slightly. Lard exports and shipments in 1969/70 rose over 40% to 405 million pounds, as movement to the United Kingdom picked up with the assistance of the 1 cent per pound U.S. export payment. Lard prices (loose, Chicago) in October averaged 12 cents per pound, slightly above a year ago but below current prices of competitive soybean oil.

SITUATION AND OUTLOOK

SOYBEANS

Harvest Prices Up Sharply

Farmers' prices for 1970-crop soybeans probably will average around $2.75 per bushel compared with $2.35 last year. Reduced supplies and strong demand are boosting prices substantially above the 1970 crop support rate of $2.25 per bushel (No. 1 grade). Farmers' prices during September-October averaged $2.72 per bushel, 46 cents above the same 2 months in 1969. Prices through the winter are expected to remain sharply above year-earlier levels. Prospective 1971/72 soybean supplies will have an important bearing on prices later in the marketing year.

Producers can receive price support on their 1970 crop soybeans through farm and warehouse loans and purchases, either as individuals or through CCC approved cooperative marketing associations. Loans are available from harvest through May 31, 1971, and will mature June 30, 1971. CCC price support activity in 1970/71 will be reduced sharply from last year's level.

USDA's sales policy for CCC soybeans this marketing year is the same as that for 1969/70. For September, it was a flat 27½ cents per bushel above the 1970 support rate at the point of storage or at the market price, whichever is higher. This represents a 10% markup on the national average loan rate of $2.25 per bushel plus a 5 cent charge.

The national average CCC minimum sales price increases at the rate of 1½ cents per month for 9 months as follows for U.S. No. 1 grade soybeans:

September 1970	$2.52½
October	2.54
November	2.55½
December	2.57
January 1971	$2.58½
February	2.60
March	2.61½
April	2.63
May	2.64½
June	2.66
July	2.66
August	2.66

For soybeans in storage at port positions, the minimum price will be as follows: Great Lakes, $2.58½; Gulf, $2.64½; East Coast, $2.65½. These prices will also be increased by 1½ cents per month beginning in October and continuing through June.

Since September 1, the beginning of the current marketing year, CCC has sold 31 million bushels of soybeans at prices substantially above their minimum markup. This reduced the CCC uncommitted inventory on October 31, to around 47 million bushels—73% below a year earlier.

More Acreage Likely in 1971; USDA Plans Special Intentions Survey

Favorable prices received for 1970-crop soybeans should be a factor encouraging farmers to plant more soybeans in 1971. Also, there may be some shift of corn acreage to soybeans—particularly in the South—because of the Southern corn leaf blight which caused losses to 1970-crop corn. The actual planting of soybeans next spring will also depend upon other factors including new farm legislation and programs.

USDA is planning a special survey of farmers to obtain 1971 prospective acreages to be planted to soybeans, corn, spring wheat, oats, barley, sorghum and cotton. The report will reflect farmers' plans as of about January 1, 1971. This early intentions survey comes

Table 2.--Soybeans: Acreage, production and price, by States and Areas, crop years, 1967-70

State and area	Acreage harvested				Yield per acre harvested				Production				Price per bushel received by farmers Season average			
	1967	1968	1969	1970 1/	1967	1968	1969	1970 2/	1967	1968	1969	1970 2/	1967	1968	1969	1970 3/
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	Bu.	Bu.	Bu.	Bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Dol.	Dol.	Dol.	Dol.
North Carolina	1,117	972	933	858	24.5	17.5	26.0	25.0	27.3	17.0	24.3	21.4	2.47	2.44	2.35	2.78
South Carolina	1,046	931	959	959	22.5	12.5	22.5	22.0	23.5	11.6	21.6	21.1	2.49	2.47	2.35	2.76
Georgia	542	472	467	467	24.0	15.0	24.0	24.0	13.0	7.1	11.2	11.2	2.45	2.45	2.40	2.78
Alabama	484	557	641	609	27.0	22.0	23.0	25.0	13.1	12.3	14.7	15.2	2.50	2.42	2.30	2.78
Total Southeast	3,189	2,932	3,000	2,893	24.1	16.8	23.9	24.0	76.9	48.0	71.8	68.9	2.48	2.44	2.35	2.78
Kentucky	388	466	485	514	28.0	26.5	28.0	28.0	10.9	12.3	13.6	14.4	2.45	2.39	2.30	2.72
Tennessee	1,115	1,193	1,193	1,205	25.0	21.0	24.0	23.0	27.9	25.1	28.6	27.7	2.44	2.39	2.30	2.66
Mississippi	2,120	2,120	2,290	2,336	23.5	27.0	22.0	25.0	49.8	57.2	50.4	58.4	2.52	2.45	2.40	2.75
Arkansas	3,989	3,989	4,228	4,228	23.0	22.0	20.5	23.5	91.7	87.8	86.7	99.4	2.48	2.45	2.40	2.76
Louisiana	1,306	1,436	1,608	1,672	23.0	27.0	19.0	23.0	30.0	38.8	30.6	38.5	2.50	2.44	2.35	2.78
Total South Central	8,918	9,204	9,804	9,955	23.7	24.7	22.7	24.9	210.3	221.2	209.9	238.4	2.48	2.42	2.35	2.73
Ohio	2,231	2,276	2,344	2,438	22.5	30.5	29.0	29.5	50.2	69.4	68.0	71.9	2.53	2.40	2.35	2.72
Indiana	2,898	3,246	3,278	3,245	24.5	32.0	32.0	32.0	71.0	103.9	104.9	103.8	2.50	2.40	2.30	2.70
Illinois	6,009	6,663	6,596	6,662	31.0	31.5	33.5	31.0	186.3	209.9	221.0	206.5	2.52	2.48	2.35	2.75
Iowa	5,246	5,561	5,283	5,494	27.5	32.0	33.0	33.0	144.3	178.0	174.3	181.3	2.51	2.44	2.30	2.66
Missouri	3,423	3,663	3,150	3,496	22.0	28.0	26.0	26.0	75.3	102.6	81.9	90.9	2.47	2.40	2.30	2.70
Minnesota	3,591	3,232	3,167	3,104	19.5	22.0	24.0	26.5	70.0	71.1	76.0	82.3	2.51	2.42	2.30	2.62
Total Eastern Corn Belt	23,398	24,641	23,818	24,439	25.5	29.3	29.6	29.7	597.1	734.9	726.1	736.7	2.51	2.42	2.32	2.69
North Dakota	290	215	185	181	13.0	15.5	16.5	15.0	3.8	3.3	3.1	2.7	2.40	2.33	2.25	2.54
South Dakota	370	300	258	255	16.5	17.5	24.5	16.0	6.1	5.2	6.3	4.1	2.45	2.37	2.25	2.58
Nebraska	782	782	813	862	22.5	23.5	33.0	23.0	17.6	18.4	26.8	19.8	2.44	2.38	2.25	2.61
Kansas	825	957	852	878	22.5	25.0	23.0	15.0	18.6	23.9	19.6	13.2	2.43	2.30	2.20	2.60
Total Western Corn Belt	2,267	2,254	2,108	2,176	20.7	20.4	24.2	17.2	46.1	50.8	55.8	39.8	2.43	2.34	2.24	2.58
All other 4/	1,995	2,073	2,127	2,156	22.6	23.0	25.5	23.5	45.6	48.3	53.4	50.3	2.44	2.36	2.28	2.66
United States	39,767	41,104	40,857	41,619	24.5	26.8	27.3	27.3	976.1	1,103.1	1,116.9	1,134.2	2.49	2.43	2.35	2.72

1/ Preliminary. 2/ November 1 indications. 3/ September-October average. 4/ New York, New Jersey, Pennsylvania, Michigan, Wisconsin, Delaware, Maryland, Virginia, Florida, Oklahoma and Texas.

Table 3.--Soybeans: U.S. supply and disposition, 1953-70

Year beginning September	Supply								Disposition							
		Stocks, September 1							Domestic disappearance							
			Government 1/							Used for seed						
	Production	Trade 1/	Owned by CCC	Under loan	Reseal	Total	Total stocks	Total supply	Crushings	Total	Per acre planted 2/	Feed	Residual 3/	Total domestic use	Exports	Total disposition
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.
1953	269.2	18.7	2.2	1.5	---	3.7	22.4	291.6	217.8	22.9	1.24	1.4	1.3	243.4	40.1	283.5
1954	341.1	8.0	4/	.1	---	0.1	8.1	349.2	241.4	23.4	1.19	1.6	2.9	269.3	57.3	326.6
1955	373.7	13.2	8.2	1.2	---	9.4	22.6	396.3	281.9	25.8	1.19	1.6	-2.6	306.7	68.6	375.3
1956	449.3	20.9	4/	.1	---	.1	21.0	470.3	313.6	26.4	1.20	1.7	13.3	355.0	83.7	438.7
1957	483.4	24.2	6.2	1.2	---	7.4	31.6	515.0	350.9	29.5	1.17	1.5	1.9	383.8	88.4	472.2
1958	580.2	26.2	12.7	3.9	---	16.6	42.8	623.0	398.8	27.4	1.17	1.9	2.1	430.2	105.0	535.2
1959	532.9	29.0	44.6	5/	14.2	58.8	87.8	620.7	394.0	29.3	1.20	1.5	4.2	429.0	139.9	568.9
1960	555.1	36.9	14.7	.2	---	14.9	51.8	606.9	406.1	32.5	1.17	1.3	5.2	445.1	134.7	579.8
1961	678.6	27.1	---	---	---	---	27.1	705.7	431.4	33.3	1.17	1.3	12.0	478.0	149.4	627.4
1962	669.2	19.8	47.0	.4	11.1	58.5	78.3	747.5	472.8	34.6	1.17	1.1	12.5	521.0	180.5	701.5
1963	699.2	41.2	2.5	2.2	0.1	4.8	46.0	745.2	436.8	36.0	1.14	.9	17.0	490.7	187.2	677.9
1964	700.9	41.3	11.8	11.2	3.0	26.0	67.3	768.2	479.0	40.3	1.14	.9	6.1	526.3	212.2	738.5
1965	845.6	29.7	---	---	---	---	29.7	875.3	537.5	42.9	1.15	.9	7.8	589.2	250.6	839.8
1966	928.5	35.6	---	---	---	---	35.6	964.1	559.4	47.1	1.15	1.0	4.9	612.4	261.6	874.0
1967	976.1	56.2	7.4	21.5	5.0	33.9	90.1	1,066.2	576.4	47.8	1.14	.9	8.2	633.3	266.6	899.9
1968	1,103.1	28.4	29.4	67.0	41.5	137.9	166.3	1,269.4	605.9	47.7	1.13	.8	3.8	658.2	286.8	945.0
1969 7/	1,116.9	15	171.4	6/61.9	103.5	336.8	324.4	1,441.3	737.5	48.8	1.13	.9	-3.9	783.3	428.7	1,212.0
1970 8/	8/1,134	33	150	5	41	196	229	1,363								1,300

1/ Estimates. 2/ In the following year. 3/ Mostly statistical discrepancies. 4/ Less than 50,000 bushels. 5/ Small quantities included with reseal. 6/ Some of these soybeans probably had been redeemed prior to September 1. 7/ Preliminary. 8/ Production indicated November 1. Disposition is forecast.

after most of the fall harvest is complete. The purpose of the report is to assist both farmers and the USDA in evaluating what changes, if any, may be necessary to assure adequate production of these crops in 1971. Historically, soybean farmers have usually stuck close to their March 1 planting intentions.

Production Up Slightly; Usage May Exceed Crop by 15%

The 1970 soybean crop is estimated at 1,134 million bushels, about 2% above last year. There was more acreage for harvest this year, while yields equaled the 1969 record. Carryover stocks on September 1 were 229 million bushels, 95 million below September 1969. This brings prospective supplies for the 1970/71 marketing year to an estimated 1,363 million bushels compared with 1,441 million last season.

Soybean use in 1970/71 is expected to expand to approximately 1.3 billion bushels, up slightly from the 1969/70 record level of 1.2 billion bushels. This utilization rate would exceed the 1970 soybean crop by about 15%. The anticipated increase in usage will be small (6 to 7%) when compared with last year's record gain of nearly 30%. The 1960-69 average annual growth rate was about 8%.

Smaller supplies and higher prices are holding down this year's gain in usage. But even with only a small gain, carryover stocks by next September will likely be drawn down to minimum operating levels, and perhaps the smallest since the 36 million bushels in 1966.

Crushings Rise Moderately; Margins Stay Favorable

Soybean crushings for the marketing year started in September are expected to total around 5% above the 737 million in 1969/70. The September-October crush totaled 121 million bushels, about 12 million more than a year ago. The crush in November-December this year is expected to total around 135 million bushels as the industry operates at near-capacity rates. The crush in these 2 months last year was 125 million bushels. The incentive to crush this season is being stimulated by the continuing strong demand for soybean oil and meal, this fall's relatively tight soybean oil situation, sharply higher oil prices, and continuing favorable processing margins.

Processing margins (based on spot prices for soybeans and oil and meal at Decatur, Ill.) this September-October averaged 45 cents per bushel, about a nickel below the same 2 months in 1969 but above the 33 cents in 1968. Margins for all of 1970/71 probably will average somewhat below the 48 cents of last year but well above the 1960-69 average of 16 cents. Processor margins are usually high in the fall, then tend to decline the rest of the marketing year. When margins are favorable early in the year many processors "fix" as much crush as possible (through the use of the futures market), encouraging sustained heavy crushings and assuring a profitable year's operation.

Processing Capacity Increasing

The U.S. soybean processing industry has kept pace with growing markets for soybean oil and meal. Annual processing capacity is now estimated at about 825 million bushels and next spring it may approach 900 million bushels. Highly favorable processing margins during 1969/70 and a near-capacity crush spurred the expansion. (See special article beginning on page 27).

The processing industry in the first part of the current year probably will be running near capacity levels because of the relatively tight oil situation and attractive conversion ratios. Later there should be some easing as the crush rate declines slightly and capacity rises—resulting in a more nearly normal relationship of crush to capacity. For all of 1970/71, the industry probably will run at 85 to 90% of potential capacity. Above the long-run average of about 80%, it will be less than the 95% rate in 1969/70.

Price Increases Could Limit Further Rise in Exports

Overseas demand for soybeans stays strong even though some recovery in world output of competitive oilseeds and fish meal appears likely. U.S. soybean exports for the current marketing year may increase as much as 5% over last year's record 429 million bushels. But higher soybean prices may dampen the rise, netting little change from the 1969/70 record high. Soybeans inspected for export from September 1 to November 20 totaled 104 million bushels compared with 103 million during the same period in 1969.

World supplies of competing oilseeds in 1970/71 will likely exceed the low levels of last season. But rising living standards and expanding livestock and poultry industries in such major markets as Western Europe and Japan will likely maintain world demand for soybeans, oil, and meal. Soybean processing capacity has expanded in Western Europe and Asia, requiring increased imports of soybeans.

An expanding European demand for soybean products—with the United States a dependable source—has resulted in substantial expansion of the European oilseed crushing industry. Most of the expansion in recent years has been the solvent extraction type particularly designed for processing soybeans. Crushing margins in Europe usually exceed those in the United States. These conditions have helped create a huge European mixed feed complex largely dependent upon imported high-protein feeds.

Western Europe, Japan, Canada, Taiwan, and Israel are the major foreign markets for U.S. soybeans, accounting for about 96% of our exports in 1969/70. These countries buy U.S. soybeans for dollars for use as animal feed and as edible oil in food products. Japan also buys soybeans for use as edible protein.

Table 4.--Soybeans, soybean meal and soybean oil: U.S. exports by country of destination, and total value, 1966-69

Continent and country of destination	Soybeans 1/					Soybean meal					Soybean oil				
	Year beginning September					Year beginning October					Year beginning October				
	1966	1967	1968	1969 2/	1970	1966	1967	1968	1969 2/	1970	1966	1967	1968	1969 2/	1970
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
North America															
Canada	24,202	21,736	37,856	66,087		238.4	227.8	262.9	270.9		22	25	29	51	
Dominican Republic	---	---	---	37		4/	4/	4/	.4		9	50	28	25	
Haiti	3/	---	---	---		---	---	---	.2		14	17	19	19	
Mexico	259	308	824	5,004		17.0	2.7	.9	2.8		5/	11	4	18	
Panama	---	---	---	---		2.5	1.1	1.4	1.0		13	11	5/	17	
Other	9	3/	---	358		22.3	21.6	20.9	27.1		20	14	19	21	
Total	24,470	22,044	38,680	71,486		280.2	253.2	286.0	302.4		78	128	99	151	
South America															
Argentina	2	1	4	3/		.4	.2	4/	---		5/	---	2	---	
Brazil	---	6	---	---		4/	.1	---	---		28	21	9	10	
Chile	---	---	---	---		---	---	---	3.3		14	33	31	38	
Colombia	---	---	---	---		---	---	---	---		18	9	8	17	
Ecuador	---	---	---	---		.1	---	---	---		10	6	9	12	
Peru	1	---	---	202		.3	4/	---	4/		14	5	9	59	
Venezuela	1,249	1,336	1,650	2,070		.1	.1	.1	4/		5	2	3	5/	
Other	3/	---	---	---		.1	4/	.2	.2		4	1	5/	3	
Total	1,252	1,343	1,654	2,272		1.0	.4	.3	3.5		93	77	71	139	
Western Europe															
Austria	---	---	---	---		7.3	7.0	1.3	5.2		---	---	---	---	
Belgium-Luxumbourg	8,812	8,698	10,237	16,115		221.4	240.7	166.9	219.0		5/	5/	5/	6	
Denmark	14,843	15,516	11,797	18,408		109.4	66.0	18.3	32.5		5/	---	5/	5/	
Finland	298	---	---	---		---	---	---	---		5/	---	5/	5/	
France	2,241	551	284	4,988		431.5	495.4	471.8	622.8		5/	5/	5/	5/	
Germany, West	32,657	31,966	30,515	41,778		458.1	508.2	636.5	855.9		5/	5/	5/	2	
Greece	---	---	---	---		6.3	2.1	.3	---		23	---	---	---	
Ireland	---	---	---	---		22.7	31.0	43.2	60.4		---	---	---	---	
Italy	18,041	14,788	16,428	25,413		192.0	190.5	231.9	309.5		5/	5/	5/	5/	
Netherlands	35,991	36,835	42,660	57,397		417.9	546.9	515.8	659.0		5/	5/	5/	1	
Norway	5,730	4,959	4,247	5,434		---	---	4/	4/		5/	5/	---	5/	
Spain	27,356	29,498	31,172	36,349		8.1	15.0	96.1	34.1		6	1	---	---	
Sweden	2	1	3	8		.2	.5	.3	1.1		5/	5/	5/	5/	
Switzerland	422	431	380	495		20.2	9.4	64.3	111.8		---	---	---	---	
United Kingdom	3,840	3,919	4,840	7,510		86.1	82.0	38.5	42.9		5/	5/	1	12	
Other	3/	3/	352	1,047		16.3	28.0	33.4	18.5		9	4	2	5	
Total	150,235	147,163	150,915	214,942		1,997.5	2,222.7	2,318.6	2,972.7		38	6	3	26	
Eastern Europe															
Bulgaria	---	---	---	17		27.8	41.4	32.7	40.3		---	---	---	---	
Czechoslovakia	761	149	240	470		16.6	11.6	2.2	36.2		---	---	---	---	
Hungary	451	---	---	499		30.3	50.4	28.6	170.6		---	---	---	---	
Poland	1,714	1,256	1,381	4,928		51.2	80.6	103.0	109.9		14	16	4	10	
U.S.S.R. (Europe and Asia)	---	---	---	---		---	---	---	---		---	---	---	---	
Yugoslavia	362	---	---	---		159.3	113.7	143.3	173.8		115	---	---	1	
Other	170	---	195	---		---	5.7	11.0	5.7		---	---	5/	1	
Total	3,458	1,405	1,816	5,914		285.3	303.3	320.9	536.5		128	16	4	12	
Africa															
Algeria	---	---	---	---		---	---	---	---		14	---	3	1	
Egypt	---	---	---	---		.8	.5	1.8	3.6		58	---	---	29	
Morocco	---	---	---	---		---	---	---	---		11	55	28	53	
Tunisia	---	---	---	---		---	---	---	---		98	97	57	95	
Other	---	---	---	---		6.7	4/	4/	---		16	12	19	35	
Total	---	---	---	---		7.5	.5	1.8	3.6		197	164	107	213	
Asia and Oceania															
Australia	4	4	4	211		36.3	27.1	25.4	34.3		5	8	2	8	
Hong Kong	9	73	57	96		1.1	3.1	1.7	2.0		3	12	4	12	
India	1	4	---	---		1.3	2.4	.6	4/		229	196	328	248	
Iran	3/	11	---	---		2.1	2.5	1.8	1.1		8	7	48	159	
Israel	9,434	9,515	6,541	8,279		.1	4/	4/	4/		33	49	34	38	
Japan	60,716	73,739	69,883	101,382		2.4	16.3	19.9	83.9		5/	---	2	11	
Korea, South	801	639	632	1,338		---	4/	3.9	20.1		1	3	2	3	
Pakistan	---	---	---	---		---	---	---	---		147	224	114	355	
Philippines	11	---	---	---		30.4	47.7	43.8	49.1		10	3	5/	5/	
South Viet Nam	---	---	---	---		.4	---	.2	.4		30	37	41	7	
Taiwan	10,776	10,632	16,590	21,207		---	---	---	---		13	5	---	9	
Turkey	---	---	---	---		---	---	---	1.1		8	3	5/	6	
Other	225	5	2	1,591		11.0	20.3	13.4	24.7		55	24	10	22	
Total	82,177	94,622	93,709	134,104		85.1	119.4	116.7	216.7		542	571	585	878	
Total	261,591	266,577	286,776	428,718		2,656.6	2,899.5	3,044.3	4,035.4		1,077	963	870	1,419	
Value of Exports															
Total (Mil. dol.)	800	749	772	1,138		233	243	251	337		142	106	89	176	
Per unit	$3.06	$2.81	$2.69	$2.65		$87.79	$83.81	$82.45	$83.52		13.2¢	11.0¢	10.2¢	12.4¢	

1/ Census export data to Canada overstated since Canada contains major transit ports and ultimate destination was unknown at time of shipment. Transshipment through Canadian ports are mainly destined for Western Europe and Asian countries. Census data to these countries are understated by the amount of transshipment via Canada. 2/ Preliminary. 3/ Less than 500 bushels. 4/ Less than 50 tons. 5/ Less than 500,000 pounds.

Table 5.--Soybean oil: Supply, disposition, oil equivalent of exports of soybeans, and price, 1949-70

Year beginning October	Supply: Production	Supply: Stocks, October 1	Supply: Total	Disposition: Exports	Disposition: Shipments to U.S. Territories	Disposition: Domestic disappearance: Total	Disposition: Domestic disappearance: Per capita	Soybeans (oil equivalent of exports) 1/	Price per pound (tank cars): Crude, Decatur	Price per pound (tank cars): Refined, N.Y.
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Pounds	Million pounds	Cents	Cents
1949	1,937	113	2,050	291	---	1,646	10.9	128	12.3	---
1950	2,454	113	2,567	490	---	1,906	12.4	272	17.8	21.5
1951	2,444	171	2,615	271	---	2,150	13.7	167	11.3	14.1
1952	2,536	194	2,730	93	---	2,462	15.5	320	12.1	14.8
1953	2,350	174	2,525	71	---	2,326	14.4	436	13.5	16.2
1954	2,711	127	2,838	50	---	2,609	15.9	666	11.9	14.8
1955	3,143	179	3,322	556	---	2,539	15.2	741	12.5	15.5
1956	3,431	227	3,658	807	---	2,565	15.0	937	12.7	15.4
1957	3,800	286	4,085	804	---	3,051	17.6	939	10.8	13.7
1958	4,251	2/281	4,532	930	---	3,304	18.8	1,209	9.5	11.8
1959	4,338	298	4,636	953	---	3,376	18.8	1,552	8.3	10.4
1960	4,420	308	4,728	3/721	---	3,329	18.2	1,431	11.3	13.6
1961	4,790	677	5,467	3/1,308	---	3,540	19.0	1,685	9.5	11.7
1962	5,091	618	5,709	3/1,165	---	3,624	19.2	1,984	8.9	11.1
1963	4,822	920	5,742	3/1,106	---	4,058	21.2	2.103	8.5	10.7
1964	5,146	578	5,724	3/1,340	17	4,069	21.0	2,265	11.3	13.4
1965	5,800	297	6,097	923	25	4,687	23.9	2,764	11.8	13.6
1966	6,076	462	6,538	1,077	28	4,837	24.4	2,930	10.1	12.4
1967	6,032	596	6,628	963	30	5,096	25.4	2,972	8.4	10.5
1968	6,531	540	7,071	870	29	5,756	28.4	3,148	8.4	10.4
1969 4/	7,904	415	8,319	1,419	29	6,328	30.9	4,894	11.2	13.1
1970 5/	8,250	543	8,793	1,600		6,500	31.5		6/14	6/16

1/ Calculated at 11.0 pounds of oil per bushel. 2/ Adjusted to new Census basis which includes hydrogenated oils and stearin. 3/ Includes estimates of foreign donations of fats and oils, not reported by Census, 1960-64. 4/ Preliminary. 5/ Forecast except October 1 stocks. 6/ October average.

Table 6 .--Soybean oil: Utilization, by products, 1949-70

Year beginning October	Food: Shortening	Food: Margarine	Food: Cooking and salad oils 1/	Food: Other edible	Food: Total	Non-Food: Paint and varnish	Non-Food: Resins and plastics	Non-Food: Other drying oil products	Non-Food: Linoleum and oilcloth	Non-Food: Other inedible 2/	Non-Food: Foots and loss	Non-Food: Total	Total domestic disappearance
	Million pounds												
1949	776	265	288		1,329	112	---	---	30	97	78	317	1,646
1950	795	459	344		1,599	91	62	11	7	50	87	308	1,906
1951	800	583	404		1,786	109	68	11	19	60	97	364	2,150
1952	879	735	462		2,077	155	61	9	12	42	106	386	2,462
1953	905	661	437		2,002	138	56	7	7	32	84	324	2,326
1954	979	741	545		2,264	138	71	11	2	15	107	344	2,609
1955	803	725	668		2,196	115	71	9	3	39	107	344	2,539
1956	764	836	627		2,227	117	72	9	1	31	107	337	2,565
1957	993	1,041	692		2,726	103	54	9	---	28	132	325	3,051
1958	1,136	1,082	665	77	2,960	102	66	6	---	37	133	343	3,304
1959	1,183	1,114	680	23	3,000	101	74	4	---	48	147	375	3,376
1960	1,097	1,073	793	26	2,989	96	64	4	1	36	139	340	3,329
1961	1,353	1,036	771	20	3,180	88	74	4	---	43	151	359	3,540
1962	1,222	1,069	933	15	3,239	90	78	6	---	48	163	385	3,624
1963	1,391	1,126	1,146	21	3,684	97	84	6	---	42	146	374	4,058
1964	1,404	1,107	1,100	32	3,643	94	105	5	---	57	165	426	4,069
1965	1,739	1,241	1,200	38	4,218	100	104	6	---	53	206	469	4,687
1966	1,691	1,273	1,353	58	4,375	96	97	7	---	61	201	462	4,837
1967	1,816	1,234	1,494	44	4,588	86	97	7	---	59	259	508	5,096
1968	1,978	1,290	1,967	36	5,271	87	94	7	---	61	236	485	5,756
1969 3/	2,240	1,416	2,163	37	5,856	87	79	7	---	56	243	472	6,328
1970													

1/ Adjusted for exports of refined and further processed salad oil. Prior to January 1965 no adjustment made for exports of undeodorized hydrogenated oil. 2/ Includes soap, fatty acids and other miscellaneous. 3/ Preliminary.

The total export value of the 429 million bushels of U.S. soybeans shipped in 1969/70 was a record $1,138 million (Census value), or $2.65 per bushel. This compares with 287 million bushels in 1968/69 with a total export value of $772 million.

U.S. soybeans have been competive in price, quality, and availability. Also, soybeans have duty-free or low-duty entry into the world's largest markets—the European Community, Japan, Spain, and to several other countries including Canada, the United Kingdom, Denmark, Norway, and Israel.

SOYBEAN OIL

Domestic Use and Exports to Rise Slightly

A slight increase in oil production plus a larger carryover this fall point to a record supply of about 8¾ billion pounds of soybean oil for the 1970/71 marketing year. This would be about 5% above last year.

Stocks of soybean oil on October 1 totaled 543 million pounds (crude and refined). About equal to a month's domestic use, this was still above the very low level of 415 million pounds a year ago.

Domestic disappearance of soybean oil may run around 6½ billion pounds in 1970/71—up from the 6.3 billion last year and the 5.8 billion in 1968/69. On a monthly basis, the 1970/71 prospective rate of domestic use may average around 540 million pounds compared with 527 million for the year just ended. Increased population and the trend toward use of more soybean oil per person are helping to boost consumption.

Supplies of competitive lard in 1970/71 are estimated to increase around 8% and most of this gain likely will move into domestic markets. But cottonseed oil supplies are down a tenth from last season.

Domestic use of soybean oil increased from 3.3 billion pounds in 1960/61 to 6.3 billion in 1969/70—an average annual rate of gain of 333 million pounds. On a per capita basis, the increase was from 18½ pounds to 31½ pounds. Consumption rose in each of the major food categories—margarine, shortening, and salad and cooking oils.

World demand for edible vegetable oils continues to increase. However, with large amounts of oil being produced abroad from U.S. soybeans and with increased supplies from foreign countries, dollar exports will face increased competition. Thus, soybean oil exports will continue to rely heavily on barter and P.L. 480 programs in 1970/71.

Program shipments will be sizable in the first half of the 1970/71 marketing year. For all of 1970/71, soybean oil exports probably will exceed the 1969/70 level of 1.4 billion pounds and may total around 1.6 billion.

Tight Soybean Oil Situation

With the relatively tight soybean oil situation this fall, the season's high for soybean oil prices may very well occur during the October-December quarter. Soybean crushers are operating near capacity levels and the oil inventory is low. Heavy domestic use and export requirements are adding strength to the market. October-December soybean oil exports are expected to be sharply above last year's rate, with most of the increase in commercial sales, including barter. Exports of oil would be even larger, however, were it not for tight ocean freight availabilities for nearby positions.

Factors affecting oil prices later in the marketing year will be the level of competition from foreign oils such as sunflower, peanut, fish, palm oils, aand rapeseed. World oil production in 1971 (mainly from 1970 oilseed crops) is expected to expand somewhat, with most of the increase in rapeseed and palm oils, lard and fish oil. Foreign demand for meal in the last half of 1970/71 will also influence oil prices.

Below is the expected supply and utilization of soybean oil in the October-December quarter.

Soybean oil	October-December		
	1969	1970[1]	Increase
	Million pounds	*Million pounds*	*Percent*
Stocks, October 1	415	543	31
Production	1,982	[2] 2,130	7
Total supply	2,397	2,673	11
Domestic use	1,593	1,650	4
Exports (including shipments)	287	450	57
Total disposition	1,880	2,100	12
Stocks, January 1	517		
Price per pound (crude, Decatur)	10.4¢	[3] 14.0¢	35

[1] Forecast except October 1 stocks.

[2] Based on 200 million bushel soybean crush which is near capacity rate.

[3] October 1970 average.

Monthly average soybean oil prices (crude, tanks, Decatur) trended upward rather steadily from a low of 7½ cents per pound in September 1968 to over 12 cents in September 1970. The 1969-70 average price was 11 cents per pound compared with 8½ cents the year before. Prices have continued to increase this fall and in mid-November were 14 cents compared with 11½ cents a year ago.

SOYBEAN MEAL

Small Gains in Disappearance

Soybean meal production for the 1970/71 marketing year that started October 1 is forecast at around 18½ million tons. This compares with last year's record output of 17.6 million tons and 14.6 million in 1968/69.

Table 7.--Soybean oil: Supply, disposition and price, by months, crop years, 1956-69

Year beginning October	October	November	December	January	February	March	April	May	June	July	August	Septem
	Production											
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Milli pound
1956	302	285	290	305	287	313	298	290	272	269	277	244
1957	307	313	300	328	289	330	336	347	311	328	341	270
1958	353	351	360	386	355	381	366	386	355	344	319	297
1959	391	393	372	373	338	381	368	366	349	350	358	298
1960	391	404	414	426	378	381	363	377	353	345	334	253
1961	397	418	418	442	395	423	397	425	377	384	380	334
1962	429	452	450	456	413	452	386	444	422	414	427	346
1963	442	426	425	389	376	369	386	399	386	412	414	399
1964	482	468	465	463	408	448	416	448	406	403	408	330
1965	475	510	520	533	478	526	468	538	481	452	437	382
1966	482	522	512	535	476	503	512	531	528	512	493	470
1967	529	535	526	526	510	511	473	520	508	508	478	408
1968	579	584	545	524	475	579	538	582	541	546	527	512
1969 1/	660	658	664	664	627	671	672	724	680	665	656	564
	Stocks, first of month											
1956	227	210	209	233	238	230	248	270	298	279	317	313
1957	286	305	374	406	376	360	407	442	393	343	364	337
1958	281	193	236	324	380	452	476	509	508	473	464	384
1959	298	321	422	507	565	555	600	644	574	424	452	312
1960	308	367	448	470	521	538	625	676	715	765	773	766
1961	677	738	802	860	938	969	966	939	944	825	780	700
1962	618	594	640	734	725	846	842	788	833	878	921	923
1963	920	2/	899	988	1,022	1,006	991	922	873	815	759	666
1964	578	538	533	544	587	606	614	578	573	522	499	423
1965	297	373	401	375	415	444	486	522	582	590	598	511
1966	462	458	488	511	566	582	536	600	639	597	636	693
1967	596	575	575	663	688	695	712	747	746	706	743	696
1968	540	541	563	589	526	518	611	596	624	557	563	552
1969 1/	415	471	492	517	552	559	561	632	716	651	638	671
1970 1/	543											
	Exports 3/ 4/											
1956	82	39	100	92	88	129	73	60	62	34	20	27
1957	38	12	48	53	15	55	34	194	96	64	91	104
1958	76	20	70	88	10	49	57	112	53	155	103	135
1959	32	60	33	31	56	52	100	110	171	81	196	30
1960	42	78	111	75	44	14	66	29	91	64	74	32
1961	60	53	65	84	79	76	163	106	174	175	150	122
1962	63	85	97	18	46	163	196	104	78	85	88	143
1963	100	42	57	70	75	69	126	63	114	131	133	125
1964	110	118	158	70	74	156	108	107	108	95	137	117
1965	39	42	189	64	71	73	51	78	79	66	105	91
1966	35	69	114	48	87	145	70	106	146	105	51	130
1967	91	128	58	41	88	86	58	71	133	59	43	138
1968	81	66	116	61	22	41	105	58	132	78	37	102
1969 1/	56	118	112	75	62	166	85	94	214	152	145	168
	Domestic disappearance											
1956	236	247	166	208	207	166	203	202	229	197	260	244
1957	249	232	221	305	290	227	267	202	265	243	277	272
1958	314	288	201	241	273	308	275	275	338	197	296	248
1959	336	231	254	285	292	283	225	326	327	242	303	272
1960	290	246	281	300	317	280	246	309	211	272	268	309
1961	276	300	295	280	285	349	260	314	322	253	310	294
1962	390	322	260	446	246	292	245	295	299	286	337	206
1963	362	385	279	284	317	315	329	385	331	337	373	363
1964	412	356	296	351	315	285	344	345	349	331	347	338
1965	360	440	357	430	378	412	381	399	394	378	419	340
1966	451	423	376	432	373	404	377	387	424	368	385	437
1967	459	408	379	460	416	409	379	451	414	412	482	427
1968	496	496	402	526	460	445	448	497	476	462	501	548
1969 1/	549	518	526	554	559	503	516	546	531	526	478	522
	Price per pound, crude, tank cars, f.o.b. Decatur											
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
1956	12.5	13.6	14.1	14.4	14.0	13.1	12.4	11.7	11.7	11.9	11.4	11.3
1957	11.3	11.6	11.4	11.5	11.4	11.0	11.0	11.0	10.2	9.9	10.0	9.8
1958	10.2	10.4	9.5	9.5	9.3	9.3	9.3	9.4	9.5	9.2	9.3	9.1
1959	8.6	8.0	7.8	7.8	7.6	7.6	8.0	8.2	8.7	9.0	9.5	9.2
1960	9.4	10.2	10.0	10.9	12.2	13.0	13.3	12.7	11.6	10.9	10.9	10.5
1961	10.7	10.4	10.5	10.5	10.2	10.1	9.9	9.3	8.4	8.0	8.2	8.1
1962	8.7	8.6	8.6	8.9	9.2	9.3	9.1	9.2	9.1	9.0	8.3	8.5
1963	9.2	9.1	8.3	8.1	8.0	8.1	7.9	8.4	8.2	8.5	8.8	9.7
1964	10.9	12.2	12.0	11.6	12.1	12.2	12.1	10.4	10.2	10.0	10.5	11.4
1965	11.5	11.2	11.2	11.9	12.0	11.3	11.6	11.3	11.2	12.3	14.1	12.3
1966	10.9	10.8	10.6	10.3	10.3	10.3	10.3	10.3	9.8	9.1	9.6	9.3
1967	8.8	8.6	8.6	8.7	9.5	9.1	8.8	8.7	7.8	7.4	7.5	7.5
1968	7.3	7.9	8.1	8.6	8.9	8.8	8.4	8.4	7.8	8.2	8.9	9.7
1969	10.6	10.9	9.6	9.6	11.5	12.2	12.2	11.3	11.1	11.5	11.6	12.1
1970	14.0											

1/ Preliminary.
2/ Not available by Census.
3/ 1961-64 includes estimates of foreign donations not reported by Census.
4/ Includes shipments to U.S. Territories beginning January 1965.

Table 8.--Cottonseed and soybean oil: U.S. exports for dollars and under P.L. 480, by country of destination, and total value, 1966-69 1/

Country of destination	Year beginning October											
	1966			1967			1968			1969		
	Public Law 480	Commercial 2/	Total	Public Law 480	Commercial 2/	Total	Public Law 480	Commercial 2/	Total	Public Law 480	Commercial 2/	Total
	-- Million pounds --											
North America												
Canada	---	30	30	3/	33	33	3/	45	45	---	79	79
Dominican Republic	9	2	11	48	2	50	12	16	28	16	17	33
Haiti	1	14	15	2	15	17	1	18	19	1	18	19
Mexico	---	3/	3/	---	11	11	---	4	4	3/	52	52
Other	12	22	34	9	20	28	1	19	20	3	36	39
Total	22	68	90	59	79	138	14	102	116	20	202	222
South America												
Argentina	---	3/	3/	---	---	---	---	2	2	---	---	---
Brazil	21	7	28	21	---	21	9	---	9	7	3	10
Chile	3	11	14	33	---	33	20	11	31	1	37	38
Colombia	12	6	18	8	1	9	8	---	8	11	6	17
Ecuador	3	8	11	1	5	6	2	7	9	4	8	12
Peru	5	9	14	5	---	5	4	5	9	3	56	59
Venezuela	4	31	35	3	34	37	1	72	73	---	44	44
Other	3	2	5	1	1	2	1	1	2	2	1	3
Total	51	74	125	72	41	113	45	97	142	28	155	183
Western Europe												
Spain	6	---	6	1	---	1	---	---	---	---	3/	3/
Sweden	---	1	1	---	3/	3/	---	7	7	---	13	13
Germany, West	---	3/	3/	---	1	1	---	15	15	3/	38	38
Netherlands	---	1	1	---	1	1	---	11	11	3/	35	35
Greece	17	6	23	---	---	---	---	---	---	---	---	---
Italy	---	3/	3/	---	3/	3/	---	3/	3/	---	3/	3/
Belgium-Luxembourg	---	3/	3/	---	3/	3/	---	3/	3/	3/	6	6
United Kingdom	---	1	1	---	3/	3/	1	---	1	3/	70	70
Other	1	7	8	4	---	4	1	---	1	---	23	23
Total	24	17	41	5	1	7	2	34	36	3/	185	185
Eastern Europe												
Poland	13	---	13	16	---	16	4	---	4	6	27	33
Yugoslavia	89	26	115	---	---	---	3/	---	3/	1	2	3
Other	---	---	---	---	---	---	---	---	---	3/	3/	3/
Total	102	26	128	16	---	16	4	---	4	7	29	36
Africa												
Algeria	12	2	14	---	---	---	3	---	3	1	---	1
Egypt	8	76	84	---	---	---	---	17	17	---	100	100
Guinea	---	3/	3/	5	---	5	6	---	6	3/	3/	3/
Morocco	11	---	11	33	22	55	28	---	28	8	57	65
Tunisia	86	12	98	92	5	97	54	3	57	78	17	95
Other	9	7	16	7	---	8	13	---	13	10	26	36
Total	126	96	223	137	27	164	104	20	124	97	200	297
Asia and Oceania												
Australia	---	5	5	---	8	8	---	2	2	7	1	8
Burma	---	45	45	---	---	---	---	---	---	---	---	---
Hong Kong	1	3	4	1	11	12	1	3	4	12	---	12
India	211	18	229	196	---	196	328	---	328	201	49	250
Iran	---	8	8	7	---	7	30	---	30	65	133	198
Israel	32	---	32	49	---	49	34	---	34	38	---	38
Japan	---	1	1	---	2	2	---	2	2	3/	17	17
Pakistan	144	3	147	224	---	224	130	1	131	269	104	373
South Viet Nam	---	30	30	37	---	37	41	---	41	2	5	7
Taiwan	1	12	13	1	4	5	---	---	---	---	9	9
Turkey	7	1	8	3	---	3	3/	---	3/	3/	6	6
Other	17	7	24	27	4	32	9	5	14	6	23	29
Total	413	132	545	545	28	574	573	13	586	600	347	947
Grand Total	738	415	1,153	834	177	1,012	743	266	1,009	752	1,118	1,870
Value of Exports												
Total (Mil. dol.)			155			116			101			216
Per pound (Cent)			13.4			11.5			10.0			11.6

1/ Census data. Breakdown between P.L. 480 and commercial provided by the Fats and Oils Division, FAS.
2/ Includes Barter, CCC credits.
3/ Less than 500,000 pounds.

Table 9.--Soybean and cottonseed oils: U.S. exports for dollars and under Public Law 480 programs, 1949-69

Year beginning October	Soybean oil								
	Dollars				PL 480			Grand total	% PL 480
	Barter	CCC credit	Other 1/	Total	Title I 2/	Title II 3/	**Total**		
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Percent
1949	---	---	291	291	---	---	---	291	---
1950	---	---	490	490	---	---	---	490	---
1951	---	---	271	271	---	---	---	271	---
1952	---	---	93	93	---	---	---	93	---
1953	---	---	71	71	---	---	---	71	---
1954	3	---	47	50	---	---	---	50	---
1955	---	---	274	274	282	---	282	556	51
1956	---	---	300	300	507	---	507	807	63
1957	---	---	202	202	602	---	602	804	75
1958	---	---	195	195	735	---	735	930	79
1959	---	---	364	364	589	---	589	953	62
1960	---	---	283	283	417	21	438	721	61
1961	---	---	624	624	466	218	684	1,308	52
1962	---	---	513	513	540	112	652	1,165	56
1963	31	---	509	540	520	45	565	1,106	51
1964	131	---	477	608	539	193	732	1,340	55
1965	176	21	182	379	324	220	544	923	59
1966	132	47	90	269	522	286	808	1,077	75
1967	67	18	47	132	618	213	831	963	86
1968	75	---	54	129	574	167	741	870	85
1969 4/	381	53	234	668	599	152	751	1,419	53
	Cottonseed oil								
1949	---	---	145	145	---	---	---	145	---
1950	---	---	57	57	---	---	---	57	---
1951	---	---	122	122	---	---	---	122	---
1952	---	---	50	50	---	---	---	50	---
1953	---	---	398	398	---	---	---	398	---
1954	32	---	508	540	118	22	140	680	21
1955	3	---	306	309	290	6	296	605	49
1956	---	---	367	367	56	---	56	423	13
1957	---	---	154	154	94	---	94	248	38
1958	---	---	263	263	141	---	141	404	35
1959	---	---	409	409	94	---	94	503	19
1960	---	---	287	287	68	14	82	369	22
1961	---	---	183	183	202	86	288	471	61
1962	---	---	206	206	132	51	183	389	47
1963	---	---	328	328	221	35	256	584	44
1964	73	---	367	440	106	93	199	639	31
1965	51	---	154	205	65	2	67	272	25
1966	38	4	33	75	---	1	1	76	1
1967	19	---	28	47	---	2	2	49	4
1968	69	---	68	137	---	2	2	139	1
1969 4/	50	69	332	451	---	1	1	452	5/
	Total soybean and cottonseed oils								
1949	---	---	436	436	---	---	---	436	---
1950	---	---	547	547	---	---	---	547	---
1951	---	---	393	393	---	---	---	393	---
1952	---	---	143	143	---	---	---	143	---
1953	---	---	469	469	---	---	---	469	---
1954	35	---	555	590	118	22	140	730	19
1955	3	---	580	583	572	6	578	1,162	50
1956	---	---	667	667	563	---	563	1,231	46
1957	---	---	356	356	696	---	696	1,052	66
1958	---	---	458	458	876	---	876	6/1,345	65
1959	---	---	773	773	683	---	683	1,456	47
1960	---	---	570	570	485	35	520	1,090	48
1961	---	---	807	807	668	304	972	1,780	55
1962	---	---	719	719	672	163	835	1,554	54
1963	31	---	837	868	741	80	821	1,689	49
1964	204	---	844	1,048	645	286	931	1,979	47
1965	227	21	336	584	389	222	611	1,195	51
1966	170	51	123	344	522	287	809	1,153	70
1967	86	18	75	179	618	215	833	1,012	82
1968	144	---	122	266	574	169	743	1,009	74
1969 4/	431	122	566	1,119	599	153	752	1,871	40

1/ Includes dollar financing by AID. 2/ Includes all sales programs, i.e., foreign currencies, which permit conversion to dollars and dollar credit sales. 3/ Includes donation programs with voluntary agencies and disaster and other relief by AID. 4/ Preliminary. 5/ Insignificant. 6/ Includes 10 million pounds of soybean oil that was shipped to Poland, Yugoslavia and Turkey that was reported by Census as shortening and mixed vegetable oils. Source: Total exports as reported by Bureau of Census. Breakdown between dollars and P.L. 480 from Fats and Oils Division, FAS.

Table 10.--Soybean oil: U.S. exports, by degree of processing, 1954-69

Year beginning October	Refined						Crude	Total crude and refined	Percent of total	
	Once-refined 1/	Refined and further processed 2/	Hydrogenated 3/	Salad oil 5/		Total			Refined	Crude
				Donated 4/	Not donated					
	-- Million pounds --								Percent	Percent
1954	23.3	13.2	6/	6/	6/	36.5	13.7	50.2	73	27
1955	63.8	404.9	6/	6/	6/	468.7	87.5	556.2	84	16
1956	93.5	327.5	6/	6/	6/	421.0	386.3	807.3	53	47
1957	159.4	421.7	6/	6/	6/	581.1	222.8	803.9	72	28
1958	91.2	329.5	6/	6/	6/	420.7	509.8	930.5	45	55
1959	120.0	224.6	6/	6/	6/	344.6	608.1	952.7	36	64
1960	40.1	237.1	6/	6/	6/	277.2	423.1	700.3	40	60
1961	269.3	320.3	6/	6/	6/	589.6	534.4	1,124.0	52	48
1962	239.4	272.2	6/	6/	6/	511.6	581.7	1,093.3	47	53
1963	229.2	382.8	6/	6/	6/	612.0	474.6	1,086.6	56	44
1964	282.3	7/	155.4	160.9	115.3	713.9	625.7	1,339.7	53	47
1965	182.7		14.0	174.7	232.2	603.6	319.0	922.6	65	35
1966	71.3		5.2	220.8	242.4	539.6	537.2	1,076.8	50	50
1967	41.8		11.5	140.6	233.8	427.7	535.1	962.8	44	56
1968	50.0		11.8	116.8	124.4	303.0	566.5	869.6	35	65
1969 8/	71.2		16.8	131.3	178.4	397.7	1,021.4	1,419.1	28	72

1/ After alkali or caustic wash, but before bleaching or deodorization. 2/ Refined and further processed by deodorizing or hydrogenation or winterizing, or any combination of those processes, except baking and frying fats, hydrogenated or hydrogenated or plasticized (shortening). 3/ Includes hydrogenated oil in flakes. 4/ Donated for relief or charity by individuals or private agencies. 5/ Refined and further processed by bleaching, deodorizing or winterizing, but not hydrogenated. 6/ Included in refined and further processed. 7/ This category split into hydrogenated and salad oils. 8/ Preliminary.
Bureau of the Census.

Table 11.--Cottonseed oil: U.S. exports, by degree of processing, 1954-69

Year beginning October	Refined						Crude	Total crude and refined	Percent of total	
	Once-refined 1/	Refined and further processed 2/	Hydrogenated 3/	Salad oil 5/		Total			Refined	Crude
				Donated 4/	Not donated					
	-- Million pounds --								Percent	Percent
1954	441.3	104.4	6/	6/	6/	545.7	133.5	679.2	80	20
1955	246.4	113.3	6/	6/	6/	359.7	245.2	604.9	59	41
1956	79.2	29.7	6/	6/	6/	108.9	314.5	423.4	26	74
1957	87.7	31.5	6/	6/	6/	119.2	128.9	248.1	48	52
1958	131.3	40.5	6/	6/	6/	171.8	232.4	404.2	43	57
1959	167.4	46.1	6/	6/	6/	213.5	289.8	503.3	42	58
1960	127.2	42.3	6/	6/	6/	169.5	186.2	355.7	48	52
1961	199.6	59.5	6/	6/	6/	259.1	131.6	390.7	66	34
1962	177.8	52.1	6/	6/	6/	229.9	123.3	353.2	65	35
1963	292.5	55.2	6/	6/	6/	347.7	206.4	554.1	63	37
1964	287.9	7/	17.2	79.1	25.9	410.1	229.0	639.1	64	36
1965	120.1		1.7	1.5	36.4	159.7	112.9	272.6	59	41
1966	38.9		1.7	.6	24.9	66.1	9.8	75.8	87	13
1967	10.9		1.6	.1	25.8	38.4	10.7	49.1	78	22
1968	54.1		.8	.1	37.0	92.0	47.0	139.0	66	34
1969 8/	329.6		32.3	1.6	15.9	379.4	72.1	451.5	84	16

1/ After alkali or caustic wash, but before bleaching or deodorization. 2/ Refined and further processed by deodorizing or hydrogenation cr winterizing, or any combination of those processes, except baking and frying fats, hydrogenated or hydrogenated or plasticized (shortening). 3/ Includes hydrogenated oil in flakes. 4/ Donated for relief or charity by individuals or private agencies. 5/ Refined and further processed by bleaching, deodorizing or winterizing, but not hydrogenated. 6/ Included in refined and further processed. 7/ This category split into hydrogenated and salad oils. 8/ Preliminary.
Bureau of the Census.

Prospective domestic use of soybean meal this year is around 14 million tons, a modest increase from the previous year's record of 13½ million tons but sharply above the 11½ million in 1968/69. This works out to about 191 pounds on a high-protein-consuming animal-unit basis—roughly the same as for 1969/70.

Factors maintaining the strong demand for soybean meal include a slight increase in the high-protein-consuming animal units, limited availabilities of fish meal, and soybean meal priced favorably in relation to feed grains. Also, there is uncertainty over corn supplies and prices (due to the blight) and how livestock producers will react.

Livestock producers may economize on feed by marketing animals at lighter weights during 1970/71. Also, higher corn and feed prices may cause some cutback in the planned expansion in livestock production, especially hogs. Poultry producers, major buyers of soybean meal have already cut operations this fall in response to lower broiler prices and higher feed costs.

Exports of soybean meal may total a little above the 4 million tons of a year earlier and substantially above the 3 million in 1968/69. This prospect is based on continued strong demand for feed and relatively high prices of corn and other feed grains in Western Europe, limited availabilities of competing oilseed and fish meals for the first part of the season, and continued heavy use of high-protein rations in poultry and pork production. Western Europe usually accounts for at least three-fourths of the total U.S. soybean meal exports. The United States will continue to ship more meal in the form of soybeans, meal equivalent basis, rather than meal as such.

The soybean crushing rate this fall is being determined largely by the strong demand and high prices for soybean oil, limiting the prospective strength in meal prices. Soybean meal prices (bulk, 44% protein, Decatur) averaged $77 per ton in October, about $2 above October 1969. Prices later in the marketing year will also be influenced by the extent of corn losses due to blight and its effect on livestock production, and competition in our export markets from foreign oilmeals. For the whole marketing year, however, soybean meal prices probably will average near last season's level of $78 per ton.

COTTONSEED

Supplies Up Slightly; Prices Strong

Cottonseed supplies this season (August 1 carryover plus the 1970 crop) are estimated at 4.4 million tons, about 2% above last season. Some cottonseed is being exported to Mexico this year because of short oilseed crops there, reducing crushing supplies for domestic processors. The season's crush likely will total about 4.0 million tons, which would produce around 1.3 billion pounds of oil and 1.9 million tons of meal

Farmers' prices for 1970-crop cottonseed averaged $52 per ton during August-October, sharply above last year's $38. The good demand for vegetable oil and meal and sharply higher prices of competing oilseeds are partly responsible. Also, the delayed cotton harvest has sharply reduced supplies this fall, boosting seed prices. Because of short supplies, some cottonseed mills have switched to processing soybeans.

Farmers' prices for 1970-crop cottonseed are being supported at $37 per ton, the same as last year. Support is operated through a product purchase program with oil mills, which agree to pay not less than the support rate for cottonseed at cotton gins. Oil mills may tender products (oil, meal, or both) through July 1971, or a later date as approved by CCC. No acquisition is likely from the 1970 crop. Two years ago, CCC acquired 331 million pounds of cottonseed oil and 144,000 tons of cottonseed meal from the 1968 crop. These products were sold during 1969/70 through various domestic and export programs.

COTTONSEED OIL

Supplies Down 12%

Carryover of cottonseed oil (crude and refined) on August 1 came only to 214 million pounds, about half the August 1969 volume. Reduced cottonseed oil production last season and the liquidation of CCC inventories were instrumental in the drawdown. With production this season estimated at 1.3 billion pounds, prospective supplies are around 1.5 billion pounds, 12% below the previous year.

Domestic use is expected to total about 1.1 billion pounds, approximating last season's rate. In recent years, domestic use has stabilized near this level, after declining from the postwar high of 1.7 billion pounds in 1953. Cottonseed oil is used in making shortening, margarine, and salad and cooking oils—the latter accounting for about three-fifths of total domestic use.

Cottonseed oil exports this marketing year may total around 300 million pounds, down from the 437 million last season when CCC sold large quantities into export channels.

Cottonseed oil prices (crude, Valley) this season are strong, reflecting smaller supplies and generally higher prices for all major food fats. During August-October they averaged about 13 cents per pound, 3 cents above a year ago. However, prices were low early last season and increased as the year progressed. For the entire 1970/71 marketing year cottonseed oil prices may average a little above the 12 cent level of 1969/70.

Cottonseed meal supplies are 2 million tons, about the same as 1969/70. Most of this will be fed

Table 12.--Soybean cake and meal: Supply, disposition and price, by months, crop years 1956-69

Year beginning October	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total or average
							Production						
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
1956	657.1	631.4	643.8	674.9	630.0	688.8	650.0	636.1	592.8	583.0	604.2	517.5	7,509.6
1957	652.3	683.2	663.3	725.9	628.1	718.4	737.8	759.2	669.6	714.7	740.5	591.3	8,284.3
1958	785.0	779.3	810.0	872.6	800.0	855.4	816.3	862.3	788.3	761.5	712.2	647.2	9,490.1
1959	822.5	838.6	795.1	791.9	714.9	800.1	771.2	769.2	733.8	733.4	752.5	629.2	9,152.4
1960	831.9	871.3	896.7	920.7	809.6	817.2	773.8	798.5	749.5	732.1	707.8	542.6	9,451.7
1961	852.9	902.7	911.9	961.5	857.4	915.1	856.9	910.7	808.9	824.3	816.5	723.1	10,341.9
1962	930.6	1,005.7	997.6	1,005.4	909.4	979.0	840.5	965.0	918.2	899.0	921.6	755.0	11,127.0
1963	965.7	939.5	933.1	862.4	827.4	810.1	840.4	877.4	850.4	916.0	910.7	875.8	10,608.9
1964	1,051.9	1,043.3	1,031.3	1,027.2	900.9	982.0	910.6	973.2	879.8	873.5	889.8	722.3	11,285.8
1965	1,024.1	1,153.6	1,163.1	1,192.3	1,073.3	1,172.2	1,039.8	1,189.2	1,071.3	999.5	971.2	851.4	12,901.0
1966	1,069.8	1,174.5	1,163.8	1,198.8	1,064.4	1,122.9	1,126.3	1,170.4	1,162.7	1,125.0	1,091.7	1,012.6	13,482.9
1967	1,193.0	1,245.1	1,209.5	1,222.1	1,162.6	1,155.3	1,063.6	1,161.9	1,133.3	1,136.4	1,054.9	922.2	13,659.9
1968	1,289.0	1,313.8	1,234.0	1,170.9	1,060.1	1,292.4	1,197.6	1,284.5	1,202.9	1,239.0	1,162.5	1,134.0	14,580.7
1969 1/	1,456.4	1,460.3	1,498.2	1,475.0	1,388.9	1,489.4	1,481.1	1,597.8	1,511.5	1,490.4	1,474.5	1,268.8	17,592.3
							Stocks, first of month						
1956	111.3	57.2	51.5	65.4	58.3	88.9	136.9	162.0	163.2	157.1	129.0	93.6	
1957	54.7	58.6	88.1	75.7	78.7	73.4	81.7	74.5	104.7	82.3	61.3	84.6	
1958	48.1	65.0	81.3	55.3	68.2	87.7	96.7	104.5	155.9	159.1	121.7	101.6	
1959	58.5	76.8	79.2	66.3	99.2	98.3	89.7	128.6	138.5	116.2	130.4	94.7	
1960	82.8	97.1	116.1	106.1	133.9	168.6	186.1	225.2	222.9	204.0	210.7	179.8	
1961	77.5	67.7	67.5	104.1	106.0	95.0	97.1	102.7	110.2	96.8	101.2	82.1	
1962	93.6	75.3	71.5	96.3	107.4	85.5	131.5	106.1	121.4	153.0	127.6	159.2	
1963	158.8	161.3	179.2	172.2	163.4	173.0	172.4	155.3	186.8	143.5	143.6	142.9	
1964	121.6	135.2	142.1	121.9	208.6	220.4	202.6	217.0	265.4	229.6	194.8	169.3	
1965	105.7	131.2	133.4	95.6	123.4	131.0	151.6	138.5	181.5	174.5	218.7	149.1	
1966	131.6	149.0	146.1	136.1	151.5	126.6	101.6	163.4	129.5	144.0	167.6	131.7	
1967	137.7	178.7	186.1	214.3	155.8	171.8	214.7	172.5	148.9	185.4	177.5	148.7	
1968	145.1	155.7	153.4	197.2	228.4	216.5	184.8	181.3	193.6	168.1	178.4	176.3	
1969 1/	156.8	159.1	173.2	131.6	135.8	154.3	149.8	156.9	233.5	213.1	164.3	207.0	
1970	136.6												
							Exports and shipments						
1956	57.9	55.4	64.1	49.5	31.7	33.3	20.2	20.5	34.1	29.0	24.4	23.1	443.2
1957	27.9	37.7	28.8	38.5	20.9	25.9	16.0	20.3	25.1	18.0	17.4	23.5	300.0
1958	27.4	64.4	54.5	55.8	41.6	46.4	43.0	26.4	38.0	38.7	36.5	39.5	512.2
1959	[illegible]	76.9	122.0	62.8	54.4	38.9	29.8	37.8	44.5	31.9	44.8	47.8	648.7
1960	52.1	63.8	66.6	64.8	39.7	51.5	21.0	42.1	68.9	45.9	42.2	31.0	589.7
1961	60.5	130.3	80.4	82.7	109.8	102.0	94.6	97.1	89.6	76.7	87.1	52.9	1,063.7
1962	101.6	159.6	114.5	39.1	163.5	195.6	126.1	132.3	142.3	120.5	91.3	89.1	1,475.5
1963	92.5	154.3	142.5	78.3	113.7	79.1	99.8	125.5	133.6	144.9	162.3	152.1	1,478.4
1964	154.7	236.7	248.3	44.6	162.6	364.7	175.4	150.2	145.9	144.0	126.3	105.8	2,059.1
1965	147.8	308.5	334.8	259.6	273.9	235.5	243.3	224.3	172.4	130.6	179.4	145.8	2,656.1
1966	180.6	235.2	270.7	252.0	240.5	222.3	216.0	262.6	211.6	227.1	194.4	192.3	2,705.3
1967	199.5	221.8	323.3	303.7	251.5	264.9	203.7	293.6	239.4	255.9	241.7	160.9	2,959.8
1968	171.8	311.7	346.4	46.2	166.1	451.0	420.0	217.5	363.8	271.4	247.3	186.8	3,099.9
1969 1/	296.2	369.9	416.5	376.8	301.1	316.4	394.0	308.5	328.7	411.4	295.2	287.3	4,102.0
							Domestic disappearance						
1956	653.3	581.7	565.8	632.5	567.7	607.5	604.8	614.4	564.8	582.1	615.2	533.3	7,123.1
1957	620.5	616.0	646.9	684.4	612.5	684.2	730.4	708.7	666.9	717.7	699.8	604.3	7,992.3
1958	740.7	701.5	781.1	801.4	738.9	800.0	765.5	784.5	747.1	760.2	695.8	650.8	8,967.5
1959	747.1	759.3	686.0	696.2	661.4	769.8	702.5	721.5	711.7	687.3	743.4	593.3	8,479.5
1960	765.5	788.5	840.1	828.1	735.2	748.2	713.7	758.7	699.5	679.5	696.5	613.9	8,867.4
1961	802.2	772.6	794.9	876.9	758.6	811.0	756.7	806.1	732.7	743.2	748.5	658.7	9,262.1
1962	847.3	849.9	858.3	955.2	767.8	737.4	739.8	817.4	744.3	803.9	798.7	666.3	9,586.3
1963	870.7	767.3	797.6	792.9	704.1	731.6	757.7	720.4	760.1	771.0	748.1	746.0	9,167.7
1964	883.6	799.7	803.2	895.9	726.5	635.1	720.8	774.6	769.7	764.3	789.0	680.1	9,242.6
1965	850.8	842.9	866.1	904.9	791.8	916.1	809.6	921.9	905.9	824.7	861.4	723.1	10,219.1
1966	871.8	942.2	903.1	931.4	848.8	925.6	848.5	941.7	936.6	874.3	933.2	814.3	10,771.5
1967	952.5	1,015.9	858.0	976.9	895.1	847.5	902.1	891.9	857.4	888.4	842.0	764.9	10,692.6
1968	1,106.6	1,004.4	843.8	1,093.5	1,005.9	873.1	781.1	1,054.7	864.6	957.3	917.3	966.7	11,469.0
1969 1/	1,157.9	1,076.3	1,123.2	1,094.0	1,069.3	1,177.5	1,080.0	1,212.7	1,203.2	1,127.8	1,136.0	1,051.9	13,510.4
							Price per ton, 44% protein, bulk, Decatur						
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
1956	45.70	47.40	46.95	49.90	46.90	46.75	45.50	45.40	44.25	46.60	52.90	51.00	47.45
1957	46.60	45.00	43.90	43.75	46.90	54.25	59.50	55.60	56.75	68.60	60.25	59.70	53.40
1958	50.60	54.75	60.90	63.25	54.75	55.10	55.90	55.40	54.80	58.50	54.25	51.70	55.80
1959	56.60	58.50	58.70	61.50	57.50	55.85	56.50	54.20	52.50	50.75	50.30	53.75	55.55
1960	48.95	44.50	51.25	55.20	61.50	64.45	73.10	71.00	63.85	65.00	68.90	59.60	60.60
1961	55.80	59.30	60.20	59.90	57.60	60.60	62.50	64.10	66.70	68.50	71.10	76.70	63.60
1962	69.00	70.60	70.50	71.90	73.10	70.80	68.30	68.10	70.40	72.00	75.20	75.20	71.30
1963	73.50	74.90	76.90	77.50	74.80	73.40	69.90	65.50	66.50	65.80	63.90	69.50	71.00
1964	69.20	66.10	67.80	68.00	69.80	68.50	69.30	68.40	74.60	74.40	69.60	76.80	70.20
1965	70.80	75.70	71.40	78.80	77.30	71.50	75.50	80.30	92.70	97.20	97.90	88.40	81.50
1966	82.20	78.90	84.60	81.70	79.50	76.60	74.50	73.70	78.10	78.20	78.70	79.20	78.80
1967	71.80	71.90	73.40	75.10	74.50	75.00	74.60	75.00	[illegible]	82.80	84.40	85.10	76.90
1968	78.20	73.50	71.60	69.80	69.90	72.60	73.30	76.10	77.50	77.30	76.90	72.70	74.10
1969	75.40	69.90	82.90	87.50	85.25	71.80	74.60	71.20	74.70	82.90	84.00	81.20	78.40
1970 1/	77.25												

1/ Preliminary.

Table 13.-- High-protein feed: Quantity available for feeding and high-protein feed-consuming animal units, 1949-70

Year beginning October	Quantity available for feeding (in terms of 44% protein soybean meal equivalent): Oilseed meal	Animal protein	Grain protein	Total	High-protein consuming animal units: Livestock	Poultry	Total	Total per animal unit
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Million	Million	Million	Pounds
1949	6,920	2,453	830	10,203	67.7	39.1	106.8	191
1950	7,798	2,470	1,069	11,337	69.7	42.2	111.9	203
1951	8,224	2,638	816	11,678	70.5	42.6	113.1	207
1952	8,079	2,663	767	11,509	69.1	41.9	111.0	207
1953	7,842	2,969	825	11,636	68.4	43.3	111.7	208
1954	7,809	2,931	853	11,593	71.1	42.2	113.3	205
1955	8,471	3,233	897	12,601	71.4	45.4	116.8	216
1956	9,350	3,005	857	13,212	69.1	46.1	115.2	229
1957	10,116	2,838	859	13,813	67.4	47.9	115.3	240
1958	11,143	3,056	903	15,102	70.3	49.1	119.4	253
1959	10,655	3,103	972	14,730	70.1	48.3	118.4	249
1960	11,259	3,281	947	15,487	70.0	51.8	121.8	254
1961	11,687	3,421	1,052	16,160	71.0	51.3	122.3	264
1962	11,976	3,543	1,069	16,588	73.0	52.0	125.0	265
1963	11,656	3,753	1,136	16,545	72.4	53.4	125.8	263
1964	11,804	3,557	1,181	16,542	69.9	55.9	125.8	263
1965	12,689	3,577	1,238	17,504	68.6	59.7	128.3	273
1966	12,561	3,950	1,250	17,761	71.0	62.0	133.0	267
1967	12,240	4,290	1,283	17,813	71.5	60.3	131.8	270
1968	13,521	3,868	1,298	18,687	72.2	62.6	134.8	277
1969 1/	15,300	3,475	1,320	20,095	73.2	68.1	141.3	284
1970								

1/ Preliminary.

Table 14.--Soybean meal: Supply, disposition, meal equivalent of exports of soybeans, and price, 1949-70

Year beginning October	Supply: Production	Imports	Stocks, October 1 1/	Total	Disposition: Exports	Shipments to U.S. Territories	Domestic disappearance: Total	Per high protein animal unit	Soybeans (Meal equivalent of exports) 2/	Price per ton, Bulk, Decatur: 44% protein	49 or 50% protein
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Pounds	1,000 tons	Dollars	Dollars
1949	4,586	26	13	4,625	47	---	4,543	85	311	64.30	---
1950	5,897	33	35	5,965	181	---	5,748	103	660	64.45	---
1951	5,704	24	36	5,764	42	---	5,670	100	404	83.35	---
1952	5,551	41	52	5,644	47	---	5,540	100	758	67.55	---
1953	5,051	16	57	5,124	67	---	4,995	89	943	78.65	---
1954	5,705	---	62	5,767	272	---	5,458	96	1,439	60.70	---
1955	6,546	---	37	6,583	400	---	6,072	104	1,603	52.55	60.85
1956	7,510	---	111	7,621	443	---	7,123	124	2,028	47.45	54.75
1957	8,284	1	55	8,340	300	---	7,992	139	2,031	53.40	61.30
1958	9,490	3/	48	9,538	512	---	8,968	150	2,615	55.80	61.60
1959	9,152	3/	58	9,210	649	---	8,479	143	3,358	55.55	60.50
1960	9,452	---	83	9,535	590	---	8,867	146	3,090	60.60	66.50
1961	10,342	---	78	10,420	1,064	---	9,262	151	3,639	63.60	69.40
1962	11,127	---	94	11,221	1,476	---	9,586	153	4,282	71.30	77.10
1963	10,609	---	159	10,769	1,478	---	9,168	146	4,539	71.00	78.70
1964	11,286	---	122	11,408	2,036	23	9,243	147	4,890	70.20	79.20
1965	12,901	---	106	13,007	2,604	52	10,219	159	5,968	81.50	89.60
1966	13,483	---	132	13,615	2,657	49	10,772	162	6,327	78.80	86.30
1967	13,660	---	138	13,798	2,899	60	10,693	162	6,415	76.90	84.30
1968	14,581	---	145	14,726	3,044	56	11,469	170	6,797	74.10	82.50
1969 4/	17,592	---	157	17,749	4,035	67	13,510	191	10,566	78.40	86.60
1970 5/	18,400	---	137	18,537	4,250	75	14,000			6/77	6/84

1/ Stocks at processors' plants. 2/ Calculated at 47.5 pounds of meal per bushel. 3/ Less than 500 tons. 4/ Preliminary. 5/ Forecast except October 1 stocks.
6/ October average.

Table 15.--Cottonseed: Supply, distribution and farm price, 1958-70

Year beginning August	Supply			Distribution				Price per ton	
	Production	Stocks at mills, August 1	Total supply	Exports	Crushed	Seed	Residual 1/	Season average received by farmers	Support 2/
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Dollars	Dollars
1958	4,798	175	4,973	4	4,439	244	186	43.80	41.00
1959	5,991	100	6,091	8	5,491	238	249	38.80	34.00
1960	5,886	105	5,991	5	5,352	281	165	42.60	34.00
1961	5,978	188	6,166	7	5,539	254	86	51.10	45.00
1962	6,139	280	6,419	10	5,833	232	110	47.90	44.00
1963	6,192	234	6,426	8	5,887	234	129	50.70	44.00
1964	6,237	168	6,405	7	5,926	222	94	47.10	44.00
1965	6,087	156	6,243	9	5,734	153	143	46.70	43.00
1966	3,960	204	4,164	5	3,791	149	10	65.90	48.00
1967	3,210	209	3,419	3	3,107	158	90	55.20	48.00
1968	4,640	61	4,701	4	4,363	156	19	50.50	48.00
1969 3/	4,186	159	4,345	23	3,924	158	160	41.10	37.00
1970 4/	4,354	80	4,434	75	4,000			5/52	37.00

1/ Includes feed, fertilizer, and loss. 2/ Purchase price, basis grade. 3/ Preliminary. 4/ Preliminary. Distribution is forecast. Production indicated November 1 if the ratio of lint to cottonseed is the same as the average for the past five years. 5/ August-October average.

Table 16.--Cottonseed oil: Supply, disposition, oil equivalent of exports of cottonseed and price 1958-70

Year beginning August	Supply				Disposition		Cottonseed (oil equivalent of exports)	Price per pound Crude, Valley
	Production	Imports	Stocks, August 1	Total	Exports and shipments	Domestic disappearance		
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Cents
1958	1,518	---	168	1,686	342	1,132	2	11.5
1959	1,861	---	212	2,073	522	1,263	3	10.0
1960	1,808	---	287	2,095	1/390	1,455	2	11.6
1961	1,865	---	250	2,115	1/470	2/1,430	2	12.4
1962	1,942	---	324	2,266	1/374	1,379	3	10.4
1963	1,981	---	514	2,495	1/483	1,387	3	9.9
1964	1,999	---	624	2,624	1/701	2/1,611	2	11.5
1965	1,896	---	421	2,317	354	1,662	3	12.8
1966	1,261	3/17	301	1,579	79	1,201	2	12.9
1967	1,036	5	298	1,338	52	1,129	1	12.7
1968	1,424	8	158	1,590	134	1,017	1	11.6
1969 4/	1,282	---	440	1,722	437	1,070	8	12.0
1970 5/	1,300	---	214	1,514	300	1,050		6/13

1/ Includes estimates of foreign donations not reported by Census; beginning January 1965 foreign donations reported by Census. 2/ Factory consumption figures used for years in which reported factory consumption exceeds domestic disappearance. 3/ Includes 7 million pounds imported in July 1967 not shown in Census report. 4/ Preliminary. 5/ Forecast, except stocks August 1. 6/ August-October average.

Table 17.--Cottonseed cake and meal: Supply, disposition and price, 1958-70

Year beginning August	Supply				Disposition			Price per ton
	Production	Imports	Stocks, Aug. 1 1/	Total supply	Exports and shipments	Feed and other uses 2/	Total disposition	Bulk Memphis, 41% protein
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Dollars
1958	2,061	150	112	2,323	6	2,202	2,208	60.55
1959	2,547	32	116	2,696	147	2,359	2,506	55.65
1960	2,504	43	190	2,738	57	2,538	2,595	55.10
1961	2,506	72	143	2,721	7	2,580	2,587	59.25
1962	2,734	45	134	2,913	97	2,625	2,722	65.60
1963	2,790	33	190	3,013	55	2,709	2,764	63.35
1964	2,769	14	249	3,032	145	2,720	2,865	59.90
1965	2,695	43	168	2,906	109	2,663	2,772	68.80
1966	1,801	59	134	1,994	9	1,838	1,847	78.55
1967	1,450	47	148	1,646	3	1,485	1,488	77.40
1968	1,985	33	158	2,176	17	2,005	2,022	66.70
1969 3/	1,835	2	155	1,992	24	1,869	1,893	71.13
1970 4/	1,875	2	98	1,975		1,875		5/76

1/ Stocks at crushing mills. 2/ Includes small quantities of cottonseed meal used for fertilizer on farms of cotton growers. 3/ Preliminary. 4/ Forecast, except stocks, August 1. 5/ August-October average.

Table 18.--Food fats and oils: Supply, disposition, and per capita disappearance, 1961-70

Item	1961	1962	1963	1964	1965	1966	1967	1968	1969 1/	1970 2/
	Year beginning October									
	-- Million pounds --									
Stocks, October 1										
Butter	238	3/419	3/450	3/188	161	68	212	197	155	171
Lard	100	73	81	68	62	64	107	94	56	60
Tallow, edible	25	21	34	25	22	40	70	39	26	37
Corn oil	33	50	63	62	35	55	47	41	71	60
Cottonseed oil	170	296	488	433	236	202	207	99	377	122
Soybean oil	677	618	920	578	297	462	596	540	415	543
Palm oil	27	16	4/37	4/22	10	17	13	28	28	20
Peanut oil	9	11	30	8	18	34	31	14	17	12
Safflower oil	27	46	80	24	35	50	60	76	61	29
Sub-total	1,307	1,550	2,183	1,407	876	992	1,343	1,128	1,206	1,054
Finished products 5/	281	473	347	232	197	224	256	231	217	236
Total food fats and oils	1,588	2,023	2,530	1,640	1,073	1,216	1,599	1,359	1,423	1,290
Imports										
Butter	2	2	2	1	4	2	2	2	2	2
Tallow, edible	6/	6/	1	1	1	1	2	6/	6/	6/
Olive oil	57	37	66	47	47	55	60	58	63	60
Corn oil	26	15	3	---	10	2	9	8	3	5
Cottonseed oil	---	---	---	---	---	17	13	6/	6/	---
Palm oil	43	27	8	5	41	89	72	161	122	150
Peanut oil	5	1	---	---	6/	---	6/	6/	6/	6/
Sesame oil	1	1	1	1	2	1	1	2	2	2
Total	134	83	81	55	104	167	159	231	191	220
Production										
Butter	1,596	1,491	1,454	1,412	1,120	1,235	1,185	1,141	1,127	1,150
Lard	2,468	2,495	2,475	2,205	1,900	2,066	2,067	1,969	1,833	1,975
Tallow, edible	439	475	572	528	551	597	540	520	567	550
Oleo oil & stearine 7/	5	4	6	7	12	14	6	6	11	10
Corn oil	361	379	413	435	449	446	442	467	474	475
Cottonseed oil	1,950	1,927	1,936	1,999	1,830	1,223	1,020	1,450	1,251	1,300
Soybean oil	4,790	5,091	4,822	5,146	5,800	6,076	6,032	6,531	7,904	8,250
Peanut oil	67	91	114	144	163	175	198	199	180	225
Safflower oil (estimate)	51	152	104	111	138	170	139	100	75	100
Sub-total	11,727	12,106	11,896	11,987	11,963	12,001	11,629	12,382	13,423	14,035
Oilseeds (oil equivalent of exports)	1,688	1,989	2,115	2,361	2,940	3,050	3,078	3,210	4,961	5,050
Total Supply	15,137	16,201	16,622	16,043	16,080	16,435	16,465	17,182	19,998	20,595
Exports and shipments										
Butter	8/19	8/131	8/319	150	24	7	31	37	8	10
Lard	508	571	706	431	218	247	246	281	405	375
Tallow, edible	5	5	4	5	3	5	6	8	11	10
Oleo oil & stearine	5	4	6	7	12	14	5	5	11	10
Corn oil	---	---	---	---	---	18	25	29	34	30
Cottonseed oil	8/471	8/389	8/584	641	275	78	51	141	453	1,900
Soybean oil	8/1,308	8/1,165	8/1,106	1,357	948	1,105	993	899	1,448	
Peanut oil	6/	4	67	75	14	6	4	28	34	50
Processed food oils 9/	77	94	111	79	64	76	59	61	55	60
Sub-total	2,394	2,362	2,903	2,744	1,558	1,557	1,427	1,490	2,459	2,445
Oilseeds (oil equivalent)										
Cottonseed	3	3	3	3	3	2	1	1	9	25
Soybeans	1,685	1,984	2,103	2,265	2,764	2,930	2,972	3,148	4,894	4,950
Peanuts (for crushing abroad)	1	2	9	29	43	47	28	9	12	25
Safflower	---	---	---	64	130	71	77	52	45	50
Sub-total	1,688	1,989	2,115	2,361	2,940	3,050	3,078	3,210	4,961	5,050
Total exports	4,082	4,351	5,018	5,104	4,498	4,608	4,505	4,700	7,420	7,495
Domestic disappearance										
Butter	1,400	1,332	1,399	1,291	1,193	1,088	1,172	1,148	1,103	1,125
Lard	1,982	1,904	1,786	1,780	1,676	1,781	1,834	1,726	1,425	1,600
Tallow, edible	438	457	578	527	530	563	567	526	544	525
Corn oil	370	381	416	462	439	438	432	416	454	450
Cottonseed oil	1,352	1,347	1,407	1,555	1,590	1,157	1,090	1,031	1,054	1,025
Soybean oil	3,540	3,624	4,058	4,069	4,687	4,837	5,096	5,756	6,328	6,500
Olive oil	57	37	66	47	47	55	60	58	63	60
Palm oil	54	43	23	17	34	93	57	161	130	150
Peanut oil	70	69	69	59	133	172	211	168	151	165
Safflower oil	32	119	160	100	123	159	124	115	107	100
Sesame oil	1	1	1	1	2	1	1	2	2	2
Processed food oils 9/	-77	-94	-111	-79	-64	-76	-59	-61	-55	-60
Total	9,219	9,220	9,852	9,829	10,390	10,268	10,585	11,046	11,306	11,640
Total (calculated net) 10/	9,027	9,346	9,957	9,864	10,363	10,236	10,610	11,060	11,387	
Total use for food 11/	8,599	8,845	9,605	9,298	10,044	10,030	10,315	10,591	10,978	
	-- Pounds --									
Per capita disappearance										
Butter (fat content)	6.1	5.7	5.9	5.3	4.9	4.4	4.7	4.6	4.3	
Margarine (fat content)	7.3	7.8	7.6	7.8	8.3	8.6	8.5	8.5	8.8	
Lard (direct use)	7.1	6.5	6.4	6.2	5.7	5.4	5.4	5.2	4.5	
Baking and frying fats	13.1	13.6	14.0	13.6	16.0	15.7	16.1	16.6	17.5	
Salad and cooking oils	10.4	10.6	12.0	12.2	12.9	12.8	13.2	14.0	15.0	
Other edible uses	1.4	1.3	2.9	.4	2.2	2.5	2.4	2.3	2.4	
Total (fat content)	44.8	45.5	48.8	46.6	50.0	49.4	50.3	51.1	52.6	

1/ Preliminary. 2/ Forecast except October 1 stocks. 3/ Includes estimates of butter oil, ghee, and canned butter. 4/ Includes stocks held by GSA. 5/ Shortening, margarine (fat content), and salad and cooking oils. 6/ Less than 500,000 pounds. 7/ Represents exports only; production data are not available. 8/ Includes estimates of foreign donations of fats and oils, not reported by Census. 9/ Includes exports of processed food oils not classified by kind, shortening and other secondary fats. 10/ Adjusted to reflect changes in stocks of finished products. 11/ Excludes food fats and oils used for non-food purposes, but includes non-food oils (coconut and palm kernel) used in food.

domestically. Prices (41% protein, expeller, Memphis) during August-October averaged about $76 per ton, $9 above the same period a year ago. Prices may stay strong and for all of 1970/71 averaging above the $71 of the previous year.

LARD

Supplies Up 8%

Lard supplies during the current marketing year are estimated at 2 billion pounds, about 8% more than 1969/70. Increased hog slaughter will account for the gain, as lard yield per animal is expected to continue downward.

Last year lard yield per hog averaged 22 pounds, about half a pound below 1968/69 and 10 pounds below the mid-1950's. Lard yields have been declining steadily over the years, reflecting the trend toward production of meat-type hogs. Conversely, pork yield per hog last season averaged 155 pounds, about 3 pounds above 1968/69 and 23 pounds more than the mid-1950's.

Domestic use of lard in 1970/71 is expected to total around 1.6 billion pounds compared with 1.4 billion the previous year. Larger supplies, slightly less exports, and more competitive prices in relation to other food fats likely will channel a greater volume into domestic use. The increase probably will go into the manufacture of shortening, as direct use may decline again. Last season, usage was down in all major categories, reflecting the short supply and relatively high prices.

Lard exports and shipments in 1970/71 are expected to fall a little below the 405 million pounds moved last season, due to continued high prices and increased competition abroad. Approximately two-thirds of U.S. exports go to the United Kingdom, the only major foreign market for U.S. lard.

Since January 1969, lard to the U.K. has been moving under the export payment program, which has helped the United States to regain some of that market—lost in recent years to surplus lard moving under subsidy from the European Community. To date, over 450 million pounds have been programmed. Acceptances for export so far this marketing year total 40 million pounds. The payment rate has been 1 cent per pound since August 1969.

Lard prices (tanks, loose, Chicago) last season were strong—averaging 11½ cents per pound compared with 8½ cents in 1968/69. Shorter lard supplies and generally good demand for food fats and oils were major factors which kept prices high. The firm price structure has continued so far this marketing year, with lard averaging 12 cents per pound in October, half a cent above October 1969. Lard production is now increasing seasonally and rates are above last year. Prices in the next several months may soften somewhat.

BUTTER

Supplies Up; Little Change In Domestic Use

Butter production in the current marketing year started October 1 is expected to reverse the downtrend of recent years and increase slightly—possibly 2 to 3% above the 1,127 million pounds of 1969/70. With milk production rising, more will be available for butter manufacture. Carryover this fall totaled 171 million pounds, up moderately from the 155 million of a year ago. CCC owned over four-fifths of the total compared with three-fourths in October 1969. Total supplies are estimated around 1.3 billion pounds, some 3 to 4% above 1969/70.

Butter prices (grade A, bulk, Chicago) held steady at the support purchase price of 69.8 cents per pound during last spring and summer, before rising seasonally this September. During October-November they dropped back to support levels. Butter prices usually rise seasonally in the fall, reflecting storage costs. However, with larger butter production and lower commercial sales relative to a year ago, the seasonal price rise this fall may be less pronounced. If milk production continues above year-earlier levels as expected, butter prices probably will hold near support, at least until early next summer.

During 1970/71, domestic disappearance likely will total near last season's level of 1.1 billion pounds. Assuming no change in the support purchase price of butter (69.8 cents at Chicago), continued declines are expected in commercial consumption. However, under the proposed farm bill, there is no mandatory support for butterfat in farm-separated cream. Annual per capita consumption of butter is currently about 4.3 pounds (fat content) compared with around 6 pounds a decade ago.

Butter exports and shipments in 1970/71 may total around 10 million pounds, up from the 8 million of last season. Except when stocks have been excessively large, exports in most years have been small. Over the past decade, butter exports have ranged from 319 million pounds (mostly in the form of butter oil and ghee) in 1963/64 to 7 million in 1966/67. Of last season's total, about 6 million pounds were shipments to U.S. Territories.

PEANUTS

Supplies At Record Levels

Peanut supplies (farmers' stock basis) in the current marketing year which began August 1 are estimated at a record 3.3 billion pounds, about 14% above the previous year. The record-large peanut crop is estimated at 2.9 billion pounds. The bumper crop results from sharply higher yields, as acreage for harvest is virtually

Table 19.--Total commercial hog slaughter, lard and pork production, and average weights and yields, 1956-69

Year beginning October	Hogs slaughtered 1/	Average live weight per hog slaughtered	Total production		Average yield per 100 pounds of live weight hog		Average yield per hog	
			Lard rendered 2/	Pork, excluding lard 3/	Lard	Pork	Lard	Pork
	Thousand	Pounds	Million pounds	Million pounds	Pounds	Pounds	Pounds	Pounds
1956	74,234	233	2,426	9,769	14.0	56.5	32.7	131.6
1957	71,183	234	2,246	9,561	13.5	57.4	31.6	134.3
1958	78,150	237	2,514	10,657	13.6	57.5	32.2	136.4
1959	82,561	236	2,556	11,278	13.1	57.9	31.0	136.6
1960	75,995	238	2,345	10,551	13.0	58.3	30.9	138.8
1961	78,659	239	2,350	11,069	12.5	58.9	29.9	140.7
1962	82,424	238	2,389	11,685	12.2	59.6	29.0	141.8
1963	83,011	240	2,384	11,970	12.0	60.1	28.7	144.2
1964	78,354	238	2,130	11,382	11.3	61.0	27.2	145.3
1965	71,040	242	1,854	10,619	10.8	61.8	26.1	149.5
1966	81,205	241	2,034	12,211	10.4	62.4	25.0	150.4
1967	84,195	240	2,036	12,712	10.1	62.9	24.2	151.0
1968	85,792	238	1,941	13,039	9.5	63.9	22.6	152.0
1969	81,855	241	1,810	12,649	9.2	64.1	22.1	154.5

1/ Represents slaughter in federally-inspected establishments plus non-inspected slaughter in retail and wholesale establishments. Does not include farm slaughter. 2/ Includes rendered pork fat. 3/ Excludes lard and rendered pork fat.

Table 20.--Lard: Supply and disposition, 1956-70

Year beginning October	Supply						Disposition				Price per pound, loose, Chicago
	Production				Stocks October 1	Total	Exports and shipments			Domestic disappearance 1/	
	Federally inspected	Other commercial	Farm	Total			Exports	Shipments	Total		
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Cents
1956	2,136	290	188	2,614	123	2,737	530	60	590	2,039	12.7
1957	1,973	273	177	2,423	69	2,492	394	65	461	1,994	11.6
1958	2,223	291	165	2,679	46	2,725	536	73	608	2,024	8.7
1959	2,253	303	170	2,726	93	2,819	655	62	716	2,003	8.2
1960	2,076	269	136	2,481	92	2,573	446	66	513	1,969	9.9
1961	2,087	263	118	2,468	100	2,568	446	62	508	1,982	8.6
1962	2,130	259	106	2,495	73	2,568	508	63	571	1,904	8.2
1963	2,143	241	91	2,475	81	2,556	637	69	706	1,786	9.2
1964	1,915	215	75	2,205	68	2,273	366	65	431	1,780	11.5
1965	1,655	199	46	1,900	62	1,962	156	62	218	1,676	11.7
1966	1,825	209	32	2,066	64	2,130	184	63	247	1,781	8.7
1967	1,851	185	31	2,067	107	2,174	183	63	246	1,834	6.2
1968	1,807	135	28	1,969	94	2,063	223	58	281	1,726	8.4
1969 2/	1,701	109	23	1,833	56	1,889	349	55	405	1,425	11.6
1970 3/				1,975	60	2,035			375	1,600	4/ 12

1/ Adjusted for estimated changes in stocks on farm. 2/ Preliminary. 3/ Forecast except stocks October 1. 4/ October average.

Table 21.--Lard: Utilization, year beginning October, 1956-69

Year beginning October	Food uses				Non-food uses			Domestic disappearance		
									Per capita	
	Shortening	Margarine	Direct use	Total	Soap	Other industrial	Total	Total	Direct use	Total
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Pounds	Pounds
1956	425	27	1,584	2,036	1	2	3	2,039	9.3	12.0
1957	345	19	1,630	1,993	1/	1	1	1,994	9.4	11.5
1958	425	26	1,564	2,015	----	10	10	2,024	8.9	11.5
1959	511	60	1,421	1,992	----	11	11	2,003	7.9	11.1
1960	497	58	1,399	1,954	----	15	15	1,969	7.6	10.8
1961	562	80	1,324	1,966	----	16	16	1,982	7.1	10.7
1962	588	76	1,225	1,889	----	15	15	1,904	6.5	10.1
1963	470	68	1,231	1,769	----	18	18	1,786	6.4	9.3
1964	473	94	1,200	1,767	----	13	13	1,780	6.2	9.2
1965	477	67	1,115	1,659	----	17	17	1,676	5.7	8.5
1966	552	122	1,080	1,754	----	28	28	1,781	5.4	9.0
1967	584	142	1,085	1,811	----	23	23	1,834	5.4	9.1
1968	537	119	1,045	1,701	----	25	25	1,726	5.2	8.5
1969 2/	416	60	928	1,404	----	22	22	1,425	4.5	7.0

1/ Less than 500,000 pounds. 2/ Preliminary.

Table 22.--Lard and inedible tallow and grease: U.S. exports and shipments, by country of destination, and total value, 1966-69

Country of destination	Year beginning October									
	Lard					Inedible tallow and greases				
	1966	1967	1968	1969 1/	1970	1966	1967	1968	1969 1/	1970
	-- Million pounds --									
North America										
Canada	19	19	21	15		11	10	12	16	
Dominican Republic	2/	2/	2/	---		14	14	18	17	
El Salvador	2/	2/	2/	2/		14	22	23	25	
Guatemala	2/	2/	---	2/		33	39	11	25	
Mexico	15	21	34	40		5	9	30	79	
Other	12	14	8	6		36	43	42	59	
Total	46	54	63	61		112	137	135	221	
South America										
Columbia	2/	1	1	2/		33	55	58	35	
Ecuador	2/	2/	---	---		33	36	27	32	
Peru	2	2	1	1		22	24	29	21	
Venezuela	2/	2/	2/	2/		15	25	18	12	
Other	1	2/	2/	2/		1	2	1	1	
Total	3	3	2	2		104	142	133	101	
Western Europe										
Belgium-Luxembourg	1	1	1	1		17	10	12	29	
France	---	2/	---	2/		28	10	8	13	
Germany-West	2	3	1	1		50	57	48	50	
Italy	---	---	---	---		128	102	71	67	
Netherlands	---	2	2/	---		183	200	105	158	
Norway	---	---	---	---		4	4	3	4	
Spain	---	---	---	---		116	114	135	131	
Switzerland	---	2/	---	---		39	13	13	10	
United Kingdom	130	114	153	252		55	59	46	59	
Other	2/	2/	2/	---		29	28	24	31	
Total	133	120	155	255		649	597	465	552	
Eastern Europe										
Poland	---	4	---	13		29	47	17	46	
Yugoslavia	---	---	---	9		5	2/	---	---	
U.S.S.R. (Europe and Asia)	---	---	---	---		---	---	---	---	
Other	---	---	---	---		2/	---	---	---	
Total	---	4	---	22		34	47	17	46	
Africa										
Algeria	---	---	---	---		23	30	18	31	
Egypt	---	---	---	---		137	102	102	120	
Ghana	---	---	---	---		34	42	45	33	
Morocco	---	---	---	---		25	31	25	34	
Union of South Africa	2/	---	2/	2/		21	29	25	18	
Other	2/	2/	---	---		25	24	23	17	
Total	2/	2/	2/	2/		265	258	238	253	
Asia										
Turkey	---	---	---	---		30	14	40	16	
China (Taiwan)	---	---	---	---		54	57	45	44	
Japan	1	2/	2	1		518	562	509	409	
Korea	---	---	---	8		62	75	84	99	
India	2/	---	---	---		223	168	241	150	
Iran	---	---	---	---		40	38	34	37	
Pakistan	---	---	---	---		100	92	48	99	
Philippines	2/	2/	2/	---		12	15	14	15	
Other	1	1	2/	2/		8	8	5	7	
Total	2	1	3	10		1,048	1,029	1,019	876	
Total Exports	184	183	223	349		2,212	2,211	2,007	2,050	
Shipments to U.S. Territories:										
Puerto Rico	63	63	59	55		2	1	1	1	
Virgin Islands	2/	2/	2/	2/		---	---	---	---	
Guam	2/	2/	2/	2/		---	---	---	---	
Total shipments	63	63	59	55		2	1	1	1	
Grand total (exports and shipments)	247	246	281	405		2,214	2,212	2,009	2,051	
Value of Exports 3/:										
Total (Mil. dol.)	20	15	19	42		164	134	133	176	
Per pound (Cents)	10.9	8.2	8.5	12.0		7.4	6.0	6.6	8.6	

1/ Preliminary. 2/ Less than 500,000 pounds. 3/ Excludes value of shipments.

unchanged from a year ago. Yields per acre—at a record 2,016 pounds—are 273 pounds above 1969, with all 3 major growing areas showing gains.

Supplies from this year's crop are well in excess of edible requirements and CCC will acquire a substantial volume under the price support program—possibly about one-third of the new crop. Prices to farmers this fall are averaging near support and large quantities are going under loan. The 1970 support price is $255 per ton (12.75 cents per pound), $7.50 above a year ago. Support by type is as follows: Virginia, $264.93; Runner, $245.23; Southeast Spanish, $256.77; Southwest Spanish, $252.45; and Valencia (suitable for cleaning and roasting), $264.93. Price support is available through loans and purchases.

Edible Use Increases

Peanuts are consumed primarily as edible food—in peanut butter, peanut candy, salted and roasted peanuts, and other similar products. These uses account for about two-thirds of total annual production. Over the past decade, consumption rose about 3% annually, reflecting increases in both population and per capita use. Use in peanut butter alone accounts for nearly half of the total consumed in these products, with salted peanuts and peanut candy accounting for about another fifth each. The balance is used as roasted-in-shell, farm use, and other miscellaneous items.

In 1969/70, use in edible products totaled 1.6 billion pounds (farmers' stock basis), nearly 3% above the previous year. This works out to about 7.8 pounds per person. During this marketing year, consumption is expected to increase slightly again, with per capita use probably reaching 8 pounds.

Crushings and Exports Absorb Excess Production

Peanuts in excess of edible requirements are acquired by the CCC under the price support program—usually around one-fourth of total annual production. These peanuts are diverted from regular commercial marketing channels and sold for either crushing or exports at roughly one-half the support price. The bulk of these peanuts go domestically for crushing—with the resultant oil used in food products such as cooking and salad oils and the meal for livestock feed or fertilizer.

In recent years, annual crushings (commercial and CCC) have averaged about 600 million pounds (farmers' stock basis), about double that of the late 1950's. However, crushings during World War II and the subsequent oil-short years also were high, in some years matching more recent levels. During 1970/71, crushings again are expected to be large, probably totaling around 800 million pounds, a third above last season.

Peanut exports now average a little under 200 million pounds a year (farmers' stock basis) compared with about 60 million in the late 1950's. However, exports vary widely, depending upon CCC availabilities of surplus peanuts and market conditions abroad. During the current marketing year, exports may rise well above the 140 million pounds of last season. In recent years the United States has developed a good market for CCC peanuts in Canada and this year exports to Japan may gain.

FLAXSEED

Large Supplies Overhang Market; Stocks Increase

Flaxseed supplies for 1970/71 total 53 million bushels, 14% above the previous year and the largest since 1954. Record carryover stocks are mainly responsible; at 22 million bushels on July 1, they were around 2¼ times above a year earlier. Most of these stocks were in CCC hands. On top of this, the Corporation owned an equivalent of another 4 million bushels of flaxseed (in the form of 80 million pounds of linseed oil).

Also, 1970 production is large. Although 15% below the large crop last year—at 31 million bushels it is 8% above the 1965-69 average. Despite increased harvested acreage of nearly 13%, lower yields reduced output in most major States—particularly in Minnesota, North Dakota, and South Dakota which normally produce over 95% of the crop. With supplies well in excess of prospective requirements, most of this year's output is expected to be placed under loan. Through October, 7 million bushels had already been put in compared with 8 million a year ago. Farmers' prices are averaging below the loan rate of $2.50 per bushel (grade No. 1). During July-October, they averaged $2.42. For all of last season, they averaged $2.65, a dime below the 1969 support.

The price support program is carried out through loans and purchases. Loans are available up until 1 month prior to maturity. Loans will mature on May 31, 1971, in Minnesota, Montana, North Dakoa, South Dakota, and Wisconsin, and on April 30, 1971, in all other States (except Texas, which has a special purchase program). At maturity, CCC also will purchase any nonloan flaxseed from farmers who make application.

Flaxseed crushings in 1970/71 may increase some 6 to 7 million bushels from the 14½ million of last season. During July-October, they totaled 6 million bushels, compared with 4.9 million for this period a year ago.

The larger prospective crush this season is due mainly to USDA's flaxseed-linseed oil program—announced last August. The program is designed to reduce CCC flaxseed inventory and to increase crushings of flaxseed. Under the program, CCC-owned stocks of flaxseed are being exchanged for linseed oil. Along with each bushel of flaxseed delivered to the crusher, CCC will also deliver 5 pounds of its linseed oil. The crusher, in addition to a payment determined on a competitive bid basis, will within 6 months deliver to the Corporation 20 pounds of linseed oil for each bushel of flaxseed received. The crusher retains the linseed meal. So far, about 3 million bushels of flaxseed along with 14 million pounds of linseed oil, have been traded at an average payment of around $1.25 per bushel. Contracted deliveries of linseed oil to CCC total 56 million pounds.

Flaxseed exports in 1970/71 may fall short of last year's 6 million bushels. Stiff competition from foreign supplies—particularly flaxseed from Canada and oil and meal from Argentina—are holding U.S. exports down. Through mid-November, about 3 million bushels had been inspected for export, compared with about 5 million a year ago. Most exports go to Western Europe, the major world market for flaxseed and linseed oil.

Based on crush and export estimates, carryover stocks of flaxseed next June 30 will be around 26 million bushels, nearly a fifth above the record carryover of July 1, 1970. At current usage rates, this would be equal to about a year's supply of flaxseed.

Flaxseed production in Canada is estimated at 48 million bushels, nearly three-fourths above the previous year. Production in Argentina is tentatively estimated at about 22 million bushels—based on average yields per planted acre—down about 15% from a year ago. The combined output from these two countries—which compete with us in export markets—is close to 70 million bushels, about a third above last season.

LINSEED OIL

Stocks Buildup Likely; Prices Lowest in 30 Years

Linseed oil supplies this marketing year are estimated at 550 million pounds compared with 424 million in 1969/70. Larger prospective production from the increased crush accounts for the gain, as beginning stocks on July 1 were virtually unchanged from the 131 million pounds of July 1, 1969.

Domestic disappearance is expected to continue around the 250 million-pound-level of last season. During July-September, it totaled 74 million pounds, about the same as a year ago. Although availabilities are larger and prices are lower, no significant reversal of the downtrend in use of linseed oil is anticipated. Use last season was the lowest of record, down from the postwar high of 728 million pounds in 1950/51, and the record high of 872 million pounds in 1941/42. Non-oil substitutes have been displacing linseed oil in paints and other drying oil products, especially since the early 1950's.

Exports are not expected to vary much from the 44 million pounds of last season. With foreign supplies larger, competition will be keen. During July-September, exports totaled 7 million pounds, compared with 5 million for this period a year ago. Western Europe is the major market for linseed oil.

At this rate of utilization, a sizable buildup in oil stocks will develop. By next June 30, stocks are expected to be about double the 129 million of June 1970, or equivalent to a year's domestic use.

Linseed oil prices (raw, tank cars, Minneapolis) during July-October averaged 10½ cents per pound, 1½ cents below this same period a year ago. In mid-November, prices were quoted at about 10 cents, the lowest in nearly 30 years. Lower prices this season reflect the reduced flaxseed support rate as well as the large supplies of flaxseed and linseed oil. A relatively stable price pattern is expected to continue at the lower levels. For the entire year, prices probably will average about 10 cents per pound, around 2 cents below the previous season. Linseed meal prices (34% protein, bulk, Minneapolis) during July-October also were lower, averaging $64 per ton compared with $67 a year ago.

INEDIBLE TALLOW

Supplies Up; Utilization May Increase

Inedible tallow and grease supplies in 1970/71 are estimated at 5.3 billion pounds compared with last season's 5.1 billion. Beginning stocks on October 1 totaled 369 million pounds, about a fifth above October 1969. A slight increase in cattle slaughter and substantially heavier hog slaughter is expected to boost output to around 4.9 billion pounds, about 2% more than last season.

Domestic disappearance is expected to increase modestly from the 2.7 billion pounds of 1969/70. The record volume used last season was due to increased usage in animal feeds and fatty acids, which more than offset declines in soap; use in lubricants was unchanged.

Exports are forecast at 2.1 billion pounds, up slightly from a year ago. Most of this increase is expected to be for dollar sales, as exports under Title I of P.L. 480 program will continue small, if any, due to tight budgetary restrictions imposed upon operating funds. In 1969/70 dollar sales were up due to increases to the Netherlands, Pakistan, Egypt, Mexico, Poland and several other countries, offsetting reductions, primarily to Japan. In 1969/70, there were 48 million pounds exported under these programs, down sharply from the nearly 400 million pounds the previous year.

Inedible tallow prices (prime, c.a.f. delivered, Chicago) this fall remain strong, averaging about 8 cents per pound during October, compared with 7 ⅓ cents last year. Quotations in early November were still holding firm. Continuing heavy offtake along with the higher price structure for other fats and oils have bolstered tallow prices. However, with tallow production expected to increase slightly in coming months—along with other fats and oils—prices may ease off some. For the entire marketing year, they may average close to the 7½ cents per pound level of 1969/70.

Table 23.--Tallow, inedible, and greases: Supply, disposition and price, 1950-70

Year beginning October	Supply				Disposition			Price per pound Chicago	
	Apparent production 1/	Imports	Stocks, Oct. 1	Total	Exports and shipments	Domestic disappearance		Prime	No. 1
						Total	Per capita		
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Pounds	Cents	Cents
1950	2,343	4	279	2,626	509	1,777	11.7	13.5	11.9
1951	2,268	1	340	2,609	720	1,550	10.0	6.3	5.1
1952	2,616	1	340	2,957	1,070	1,523	9.7	4.3	3.6
1953	2,661	3	363	3,027	1,186	1,574	9.8	6.2	5.6
1954	2,875	4	268	3,147	1,265	1,620	9.9	7.0	6.5
1955	3,215	2	260	3,477	1,494	1,677	10.1	6.9	6.3
1956	3,147	3	306	3,456	1,431	1,786	10.6	7.1	6.6
1957	2,896	2/	239	3,135	1,107	1,799	10.5	7.6	7.0
1958	3,214	2	230	3,444	1,311	1,808	10.3	6.6	6.0
1959	3,540	2/	327	3,867	1,718	1,806	10.2	5.2	4.5
1960	3,561	2/	343	3,904	1,769	1,745	9.7	6.0	5.3
1961	3,776	2	389	4,167	1,710	2,093	11.4	5.1	4.6
1962	3,829	2	365	4,196	1,738	2,124	11.4	5.0	4.5
1963	4,604	2	334	4,940	2,338	2,320	12.2	5.9	5.4
1964	4,461	2	282	4,743	2,155	2,239	11.7	7.8	7.3
1965	4,419	1	351	4,770	1,962	2,393	12.3	7.3	6.8
1966	4,766	4	417	5,187	2,214	2,565	13.0	5.5	5.0
1967	4,751	6	409	5,166	2,212	2,577	12.9	4.6	4.2
1968	4,601	4	377	4,982	2,009	2,670	13.2	5.8	5.4
1969 3/	4,830	7	304	5,141	2,051	2,721	13.3	7.5	7.0
1970 4/	4,900	6	369	5,275	2,100	2,800	13.5	5/8.3	5/7.3

1/ Apparent production computed from factory consumption, net foreign trade, and change in stocks. Reported factory consumption excludes that from small rendering plants; beginning October 1966 Census reported production. 2/ Less than 500,000 pounds. 3/ Preliminary. 4/ Forecast. 5/ October average.

Table 24.--Tallow, inedible, and greases: Utilization, by products, 1950-69

Year beginning October	Non-food products						
	Soap	Animal feeds	Fatty acids	Lubricants and similar oils	Other	Loss	Total
	-- Million pounds --						
1950	1,280	---	250	28	217	1	1,777
1951	1,103	---	199	24	224	---	1,550
1952	1,008	---	237	24	252	1	1,523
1953	967	71	245	25	258	8	1,574
1954	861	174	267	38	268	12	1,620
1955	840	263	290	38	229	17	1,677
1956	788	383	284	34	285	13	1,786
1957	744	542	249	29	232	3	1,799
1958	732	476	353	66	182	---	1,808
1959	735	439	391	80	162	---	1,806
1960	732	443	351	70	151	---	1,745
1961	702	732	402	79	177	---	2,093
1962	688	774	433	78	151	---	2,124
1963	660	861	478	91	230	---	2,320
1964	690	714	530	102	203	---	2,239
1965	649	855	575	107	208	---	2,393
1966	665	972	547	98	283	---	2,565
1967	631	990	576	89	291	---	2,577
1968	637	1,059	585	98	291	---	2,670
1969 1/	605	1,091	610	97	319	---	2,721

1/ Preliminary.

Table 25.--Nonfood fats and oils: Supply, disposition, and per capita disappearance, 1961-70

Item	1961	1962	1963	1964	1965	1966	1967	1968	1969 1/	1970 2/
	-- Million pounds --									
Stocks, October 1										
Tallow, inedible and grease	389	365	334	282	351	417	409	377	304	369
Coconut oil	3/301	3/206	3/227	3/162	115	148	79	130	131	146
Linseed oil	97	84	92	151	185	189	187	162	119	130
Tung oil	10	14	8	21	54	54	69	66	57	46
Castor oil	32	35	3/221	3/192	196	191	154	108	112	117
Palm kernel oil	17	12	18	24	19	23	20	28	20	15
Fish and marine oils	180	162	182	147	192	180	160	188	131	110
Tall oil	97	127	168	246	281	258	194	168	190	136
All others 4/	---	---	24	---	---	---	---	---	---	---
Total	1,123	1,005	1,274	1,225	1,393	1,460	1,272	1,227	1,064	1,069
Imports										
Tallow, inedible and grease	2	2	2	2	1	4	6	4	7	5
Coconut oil 5/	656	799	745	725	884	813	846	813	859	825
Palm kernel oil	86	84	90	85	100	107	117	104	80	100
Tung oil	18	20	27	26	28	21	21	18	19	20
Castor oil 5/	109	96	87	128	121	95	103	137	129	100
Cod and fish liver oil	13	14	16	12	12	10	12	9	9	10
Fish and marine oils	62	86	61	81	55	63	57	58	47	50
All others 6/	36	22	21	37	39	32	39	37	32	35
Total	981	1,123	1,049	1,096	1,240	1,145	1,201	1,180	1,182	1,145
Production										
Tallow, inedible and grease	3,776	3,829	4,604	4,461	4,419	4,766	4,751	4,601	4,830	4,900
Linseed oil 7/	395	507	555	494	604	503	446	463	423	520
Tung oil	33	7	21	36	10	26	13	5	6	5
Castor oil	23	25	40	28	20	12	21	33	25	12
Fish and marine oil	246	202	192	194	154	125	161	182	199	200
Tall oil	882	948	1,079	1,136	1,231	1,223	1,222	1,294	1,242	1,285
All others 4/	---	---	---	38	70	63	63	39	73	55
Total	5,355	5,518	6,491	6,390	6,508	6,717	6,677	6,617	6,798	6,977
Total supply	7,459	7,646	8,814	8,711	9,141	9,322	9,150	9,024	9,044	9,191
Exports and shipments										
Tallow, inedible and grease	1,710	1,738	2,338	2,155	1,962	2,214	2,212	2,009	2,051	2,100
Coconut oil	2	6	6	12	8	11	7	8	9	10
Linseed oil	2	11	19	43	106	73	82	50	45	50
Flaxseed (oil equivalent)	30	93	119	88	144	118	130	158	116	80
Fish and marine oils	130	222	203	122	102	74	42	172	211	200
Tall oil	26	31	30	59	105	120	99	105	162	160
Tung oil	11	2	2	1	1	1	2	2	2	2
All others 4/	16	5	7	63	71	60	61	76	89	90
Total	1,927	2,108	2,724	2,540	2,499	2,671	2,637	2,580	2,685	2,692
Domestic disappearance										
Tallow, inedible and grease	2,093	2,124	2,320	2,239	2,393	2,565	2,577	2,670	2,721	2,800
Coconut oil	749	773	805	759	842	871	788	804	835	830
Palm kernel oil	91	79	84	89	97	110	110	112	85	100
Linseed oil	376	394	381	329	350	313	260	298	250	250
Tung oil	35	31	33	28	37	31	34	31	32	32
Castor oil	130	132	146	151	146	147	170	166	150	156
Cod and fish liver oil	12	13	15	12	12	10	12	9	9	10
Fish and marine oils	196	47	84	109	119	134	157	125	9/74	60
Tall oil	826	877	971	1,041	1,150	1,167	1,149	1,168	1,134	1,136
All others 4/	21	18	28	21	38	31	29	---	---	---
Total	4,529	4,488	4,867	4,778	5,184	5,379	5,286	5,383	5,290	5,374
Total non-food uses 8/	4,746	4,766	5,010	5,043	5,249	5,371	5,356	5,470	5,314	
	-- Pounds --									
Per capita disappearance										
Soap	4.4	4.1	4.0	4.0	3.6	3.7	3.5	3.4	3.3	
Drying oil products	5.1	4.6	4.8	4.6	4.5	4.3	4.4	4.2	3.2	
Animal feed	4.2	3.0	4.6	3.7	4.4	4.9	4.9	5.2	5.3	
Fatty acids	6.7	7.2	8.1	8.9	9.7	9.5	9.5	9.5	9.7	
Other industrial	5.1	6.3	4.7	4.8	4.5	4.6	4.3	4.6	4.4	
Total	25.5	25.3	26.2	26.0	26.7	27.0	26.7	27.0	25.9	

1/ Preliminary. 2/ Forecast except October 1 stocks. 3/ Includes Government stockpiling. 4/ Includes inedible olive oil, and other vegetable oils not shown separately. 5/ Imports of oil plus production from imported materials. 6/ Includes oiticica oil, rapeseed oil, wool grease and other vegetable oils not shown separately. 7/ Includes oil equivalent of flaxseed exported for crushing abroad. 8/ Adjusted for foreign trade and changes in stocks of fatty acids, foots and soap stocks and other inedible secondary oils; and food oils used in nonfood products and nonfood oils used in food products. 9/ Reported factory consumption which exceeds domestic disappearance.

TUNG OIL

Supplies Down 12%

Tung oil production in 1970/71 is estimated at a mere 5 million pounds, slightly less than last year. Sharply reduced output the past 2 years is due to Hurricane Camille which ripped through the Tung Belt in August 1969 and severely damaged the orchards. Carryover stocks on November 1 were estimated at 45 million pounds, nearly 10 million below a year ago. If tung oil imports remain near last year's level of 20 million pounds, this would bring the total 1970/71 supply to around 70 million pounds, about 12% below 1969/70.

Domestic disappearance in 1970/71 is estimated around 32 million pounds, approximately the average of recent years. Like linseed and other drying oils, tung oil has been adversely affected by the use of non-oil ingredients in paint formulations. Steady supply and lower price of substitute commodities in contrast to the wide fluctuations in tung oil supplies and prices have caused users to switch. In the late 1930's when domestic use of tung oil was at its peak, it totaled near 150 million pounds a year.

Last season sales from CCC stocks totaled 6½ million pounds at an average price of 23 cents per pound. Since CCC sales began in October 1966, about 53 million pounds have been sold, averaging 14 cents per pound. Approximately 1 million pounds are offered for sale twice a month by USDA.

ANNUAL OUTLOOK CONFERENCE SCHEDULED FOR FEBRUARY 1971

The National Agricultural Outlook Conference is scheduled for February 23 to 26, 1971. The Conference will give emphasis to the general domestic and international economic situation with time also devoted to the Commodity Sessions.

904202

U.S. SOYBEAN PROCESSING CAPACITY EXPANDING

by

George W. Kromer

ABSTRACT: U.S. soybean processing capacity has increased steadily over the years along with the uptrend in soybean output and growing markets for edible vegetable oils and protein. Historically, the processing industry has had excess capacity and relatively low processing margins. But more recently, processing margins have improved and the industry has used a higher proportion of potential capacity. Many processors have integrated their crushing operation into allied fields such as vegetable oil refining, food and feed manufacturing, thus improving the efficiency of the entire complex.

Key Words: Soybean processing capacity, soybean processing margins.

U.S. soybean processing industry continues to anticipate the expanding output of soybeans and the growing markets for soybean oil and meal. During the past decade, annual capacity increased from around 500 million bushels in 1960 to approximately 800 million in 1969—a total gain of 60% or an annual rate of 6%. Processing rose about in line with increased capacity. The long-run average utilization rate of capacity is about 80%; in 1969/70 it was close to 95%.[1]

Industry's soybean processing capacity this fall is estimated around 825 million bushels (annual rate). By next spring it may approach 900 million bushels. Crushers in the first part of the current marketing year probably will be operating near capacity levels because of the relatively tight soybean oil situation and favorable processing margins. Later there should be some easing of the strain on soybean processing facilities as the rate of crush declines slightly and capacity continues to increase.

The expansion in capacity now underway was encouraged by unusually high operating margins throughout the 1969/70 season and a near-capacity crush. The soybean processing industry has responded to attractive margins by expanding its capacity the following year.

The dramatic increase in domestic processing capacity is a reflection of the industry's confidence that world demand for soybean oil and meal will continue to rise and that U.S. soybean products will remain competitive in world markets. Thus, the soybean processing industry will accommodate further growth in demand for soybean products during the 1970's.

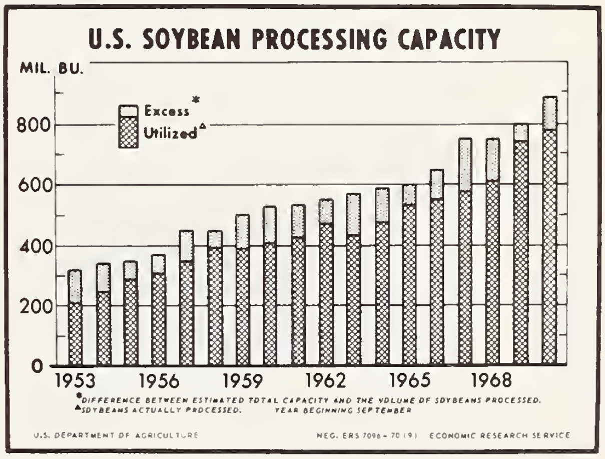

Figure 1

One factor tending to limit the processing industry's growth in exports of soybean oil and meal is the surge in U.S. exports of whole soybeans for crushing abroad. Crushing capacity in the industrialized countries of Western Europe and Japan has been expanding in response to favorable processing ratios. One trade estimate places overseas processing capacity for soybeans at more than 1 billion bushels annually, but no precise data are available. Much of this capacity can be used for processing other oilseeds as well. In recent years, most of the increase in overseas capacity has been of the solvent extraction type particularly designed for processing soybeans. Soybean crushing margins in Europe usually exceed those in the United States.

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[1] From an operating standpoint, the soybean processing industry in 1969/70 ran at maximum capacity (about 95% of estimated capacity) because, by definition, a 100% utilization rate is not attainable. The industry bases capacity estimates on the maximum or best average daily rate achieved for a month over the past 2-year period. Processing plants cannot maintain this rate of crush throughout the year because of downtime required for repairs and maintenance of equipment.

Table 26.--Soybeans received at U.S. crushing mills, by months, actual and percentage, 1964-69 1/

Month	1964/65		1965/66		1966/67		1967/68		1968/69		1969/70 2/		Average 1964-69
	Actual	% of total	Actual	% of total	Actual	% of total	Actual	% of total	Actual	% of total	Actual	% of total	% of total
	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Pct.
September	42.6	9.0	22.8	4.2	21.9	3.9	38.6	6.6	28.3	4.6	48.2	6.5	5.8
October	140.3	29.6	99.4	18.2	109.4	19.6	141.3	24.0	149.7	24.6	154.9	20.9	22.6
November	76.3	16.1	94.7	17.4	89.7	16.1	107.1	18.2	81.6	13.4	98.5	13.2	15.6
December	33.2	7.0	47.1	8.6	38.4	6.9	39.4	6.7	45.4	7.4	55.1	7.4	7.4
January	37.6	7.9	48.8	9.0	38.3	6.9	44.9	7.6	41.2	6.8	54.4	7.3	7.5
February	32.1	6.8	43.4	8.0	37.4	6.7	38.2	6.5	42.0	6.9	62.4	8.4	7.3
March	23.0	4.8	36.1	6.6	44.2	7.9	35.7	6.1	37.7	6.2	52.7	7.1	6.5
April	19.3	4.0	45.0	8.3	38.1	6.8	22.6	3.8	35.6	5.8	50.9	6.9	6.0
May	16.6	3.5	39.5	7.2	32.4	5.8	33.3	5.7	39.4	6.4	44.3	6.0	5.8
June	21.6	4.6	31.0	5.7	39.7	7.1	29.3	5.0	41.3	6.8	48.3	6.5	6.0
July	19.6	4.1	22.0	4.1	37.3	6.7	33.6	5.7	34.8	5.7	40.5	5.5	5.3
August	12.4	2.6	15.1	2.7	31.5	5.6	24.6	4.1	32.8	5.4	32.6	4.4	4.2
Total	474.5	100.0	545.2	100.0	558.2	100.0	588.5	100.0	609.7	100.0	742.7	100.0	100.0
							Cumulative data						
September	42.6	9.0	22.8	4.2	21.9	3.9	38.6	6.6	28.3	4.6	48.2	6.5	5.8
October	182.8	38.5	122.2	22.4	131.3	23.5	179.8	30.6	177.9	29.2	203.1	27.3	28.4
November	259.2	54.6	216.9	39.8	221.0	39.6	286.9	48.8	259.6	42.6	301.6	40.6	44.0
December	292.4	61.6	264.0	48.4	259.4	46.5	326.4	55.5	304.9	50.0	356.7	48.0	51.3
January	330.0	69.5	312.9	57.4	297.7	53.3	371.3	63.1	346.1	56.8	411.0	55.3	58.8
February	362.1	76.3	356.3	65.4	335.1	60.0	409.5	69.6	388.1	63.7	473.4	63.7	66.1
March	385.1	81.2	392.3	72.0	379.3	68.0	445.1	75.7	425.8	69.8	526.2	70.9	72.6
April	404.4	85.2	437.3	80.2	417.3	74.8	467.7	79.5	461.4	75.7	577.1	77.7	78.6
May	420.9	88.7	476.8	87.5	449.7	80.6	501.0	85.1	500.8	82.1	621.4	83.7	84.4
June	442.5	93.3	507.8	93.1	489.5	87.7	530.3	90.1	542.1	88.9	669.6	90.2	90.4
July	462.1	97.4	530.1	97.2	526.8	94.4	563.9	95.8	576.9	94.6	710.1	95.6	95.8
August	474.5	100.0	545.2	100.0	558.2	100.0	588.5	100.0	609.7	100.0	742.7	100.0	100.0

1/ Net receipts of soybeans at mills as reported by the Bureau of the Census. 2/ Preliminary.

Table 27.--Soybean crushings, by months, actual and percentage, 1964-69

Month	1964/65		1965/66		1966/67		1967/68		1968/69		1969/70 1/		Average 1964-69
	Actual	% of total	Actual	% of total	Actual	% of total	Actual	% of total	Actual	% of total	Actual	% of total	% of total
	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Pct.
September	36.3	7.6	30.4	5.7	35.3	6.3	42.2	7.3	38.2	6.3	47.5	6.4	6.6
October	44.3	9.2	44.1	8.2	45.2	8.1	50.4	8.7	54.7	9.0	61.8	8.4	8.6
November	43.6	9.1	48.2	9.0	49.6	8.9	51.6	9.0	55.6	9.2	62.0	8.4	8.9
December	43.2	9.0	48.9	9.1	48.9	8.7	50.6	8.8	52.2	8.6	63.1	8.6	8.8
January	43.0	9.0	50.2	9.3	50.6	9.0	51.2	8.9	49.9	8.2	62.9	8.5	8.8
February	37.8	7.9	45.1	8.4	44.6	8.0	48.6	8.4	45.0	7.4	58.8	8.0	8.0
March	40.8	8.5	49.4	9.2	46.9	8.4	48.3	8.4	54.6	9.0	62.9	8.5	8.7
April	38.2	8.0	43.9	8.2	47.5	8.5	44.6	7.7	50.4	8.3	62.5	8.5	8.2
May	40.9	8.5	50.1	9.3	49.2	8.8	48.8	8.5	54.5	9.0	67.4	9.1	8.9
June	37.1	7.8	44.7	8.3	48.8	8.7	47.5	8.2	50.6	8.4	63.7	8.6	8.3
July	36.6	7.6	42.0	7.8	47.5	8.5	47.6	8.3	52.1	8.6	62.7	8.5	8.2
August	37.1	7.8	40.4	7.5	45.4	8.1	44.9	7.8	48.2	8.0	62.1	8.4	8.0
Total	479.0	100.0	537.5	100.0	559.4	100.0	576.4	100.0	605.9	100.0	737.5	100.0	100.0
							Cumulative data						
September	36.3	7.6	30.4	5.7	35.3	6.3	42.2	7.3	38.2	6.3	47.5	6.4	6.6
October	80.6	16.8	74.4	13.9	80.5	14.4	92.6	16.1	92.9	15.3	109.4	14.8	15.1
November	124.2	25.9	122.7	22.9	130.1	23.3	144.2	25.0	148.5	24.5	171.3	23.2	24.1
December	167.4	34.9	171.6	32.0	178.9	32.1	194.8	33.8	200.7	33.1	234.5	31.8	32.8
January	210.4	43.9	221.8	41.3	229.5	41.1	246.0	42.7	250.6	41.4	297.4	40.3	41.6
February	248.2	51.8	266.9	49.7	274.1	49.0	294.6	51.1	295.6	48.8	356.3	48.3	49.6
March	289.0	60.3	316.3	58.9	321.0	57.3	342.9	59.5	350.2	57.8	419.1	56.8	58.3
April	327.2	68.3	360.2	67.1	368.5	65.7	387.5	67.2	400.6	66.1	481.6	65.3	66.5
May	368.1	76.8	410.3	76.4	417.7	74.5	436.3	75.7	455.0	75.1	549.0	74.4	75.4
June	405.2	84.6	455.0	84.7	466.5	83.3	483.8	83.9	505.6	83.4	612.7	83.1	83.8
July	441.8	92.2	497.1	92.5	514.0	91.8	531.5	92.2	557.7	92.0	675.4	91.6	92.0
August	479.0	100.0	537.5	100.0	559.4	100.0	576.4	100.0	605.9	100.0	737.5	100.0	100.0

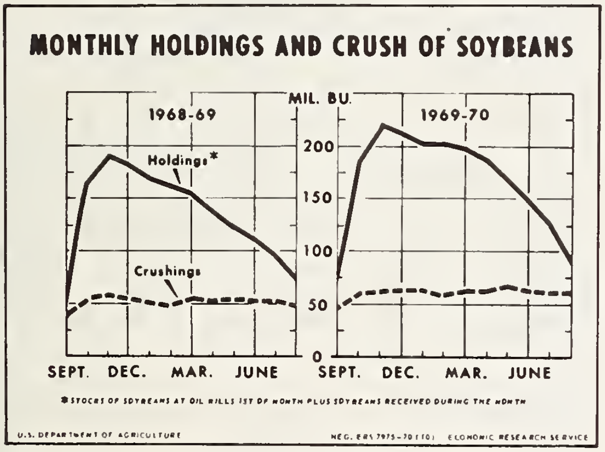
1/ Preliminary.

PROCESSORS' SOYBEAN PURCHASES HEAVIEST IN FALL

Soybeans usually move from farms to country elevators and on to processing plants. As storage space at these locations is filled, large quantities are shipped to terminal elevators. Movement takes place rather quickly after harvest—which usually extends from mid-September through December—with approximately two-thirds of the soybean crop moving off farms by January 1.

Processor purchases are heaviest during harvest when soybean prices are usually seasonally low. During 1964-69, processing plants averaged acquiring nearly a third of the year's soybean purchases by November 1 (the first 2 months of the marketing year), over a half by January 1 and about two-thirds by March 1.

Soybeans at mills are seasonally large in November and then trend downward the rest of the marketing year. On the other hand, soybean crushings are relatively steady throughout the year, with about 8% of the year's total processed each month. This in part reflects: (1) the fairly even year-round demand for soybean oil and meal products; (2) the storability of soybeans over an extended period without harm; and (3) the relative inflexibility and inefficiency incurred in altering the mill's operation once started into production.



*STOCKS OF SOYBEANS AT OIL MILLS 1ST OF MONTH PLUS SOYBEANS RECEIVED DURING THE MONTH

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 7975-70 (10) ECONOMIC RESEARCH SERVICE

Figure 2

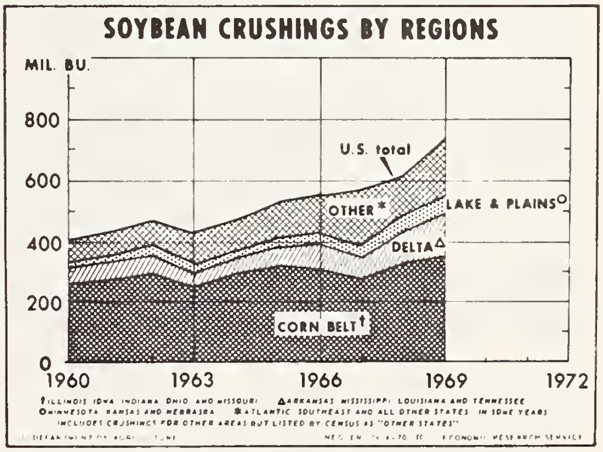
During 1964-69, the industry's monthly crush ranged from an average low of 6.6% to a high of 8.9%. September is the low month, when many mills close for repairs and maintenance before new-crop soybeans come in. The peak month is often in November or December. Last season, the peak month was in May 1970. About a third of the annual crush usually occurs by the end of December, and two-thirds by the end of April. Deviations from the cumulative seasonal pattern are relatively small, making these benchmarks useful in predicting the total crush.

NUMBER OF OIL MILLS STABILIZED DURING 1960's

The soybean processing industry has grown from a large number of relatively inefffficient, small mills independently owned into today's modern industrial complex, mostly controlled by a small number of companies. Large firms often own and operate several soybean mills (horizontal integration) while others extend their operations into vegetable oil refining, and food and feed manufacturing (vertical integration).

Currently, more than 55 soybean processing firms operate approximately 130 mills in the United States. During the 1960's the number of mills remained relatively steady, between 125 and 135. Soybean processing plants are concentrated in the main areas of soybean production but in recent years there has been a shift to the newer production areas.

In the early 1960's, about 55% of the total U.S. soybean oil mills were located in the North Central Region. By 1970, however, this share fell to about 45%. The proportion of the annual crush handled by mills in the North Central Region declined from about 71% in 1960 to 58% in 1969.



†ILLINOIS IOWA INDIANA OHIO AND MISSOURI △ARKANSAS MISSISSIPPI LOUISIANA AND TENNESSEE ○MINNESOTA KANSAS AND NEBRASKA *ATLANTIC SOUTHEAST AND ALL OTHER STATES IN SOME YEARS INCLUDES CRUSHINGS FOR OTHER AREAS BUT LISTED BY CENSUS AS "OTHER STATES"

ECONOMIC RESEARCH SERVICE

Figure 3

Soybean processing plants in the North Central Region generally have greater capacity than those elsewhere. While individual plant sizes vary widely, the average soybean mill in that region now processes 7 million bushels annually compared with 4 million for mills elsewhere.

The evolution in soybean processing technology has been from hydraulic presses to mechanical screw presses or expellers to solvent extraction. Now the U.S. processing industry is close to 100% solvent extraction. The efficiency and capacity per plant have risen markedly over the years as integrated mill operations increased and processing technology advanced. The average U.S. mill now processes 6.0 million bushels annually compared with 3.2 million in 1960.

Table 28.--Estimated number of soybean oil mills in the United States, and soybeans crushed by Regions and States, 1965-69

Region and State	Year beginning September														
	Soybean oil mills 1/					Soybeans crushed 2/					Average crush per mill				
	1965	1966	1967	1968	1969 3/	1965	1966	1967	1968	1969 3/	1965	1966	1967	1968	1969 3/
	Number	Number	Number	Number	Number	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.
Corn Belt:															
Illinois	16	16	16	14	13	147	133	131	138	175	9	8	8	10	13
Iowa	19	19	20	18	18	93	97	90	90	99	5	5	4	5	6
Indiana	5	5	5	5	5	47	42	28	38	53	9	8	6	8	11
Ohio	5	5	5	5	5	32	37	30	34	3	6	7	6	7	---
Missouri	3	3	3	3	3	---	---	---	27	28	---	---	---	9	8
Total	48	48	49	45	44	319	309	279	327	358	7	7	6	8	8
% of U.S.	38	37	36	34	33	59	55	48	54	49	---	---	---	---	---
Lake and Plains:															
Minnesota	7	7	7	7	7	33	36	32	34	42	5	5	5	5	6
Kansas	4	4	4	4	4	D	D	D	D	25	N.A.	N.A.	N.A.	N.A.	6
Nebraska	3	3	4	5	4	D	D	D	14	D	N.A.	N.A.	N.A.	3	N.A.
Total	14	14	15	16	15	33	36	32	48	67	5	5	5	4	4
% of U.S.	11	11	11	12	12	6	6	6	8	9	---	---	---	---	---
Total Central States	62	62	64	61	59	352	345	311	375	425	6	6	5	6	7
% of U.S.	49	48	49	46	45	65	61	54	62	58	---	---	---	---	---
Delta															
Arkansas	8	8	10	11	11	17	27	11	45	50	2	3	1	4	5
Mississippi	11	13	15	15	15	9	13	19	25	34	1	1	1	2	2
Louisiana	2	2	2	3	3	D	D	D	D	D	N.A.	N.A.	N.A.	N.A.	N.A.
Tennessee	7	7	7	7	8	37	43	43	42	47	5	6	6	6	6
Total	28	30	34	36	37	63	83	73	112	131	2	3	2	3	4
% of U.S.	22	23	25	27	28	12	15	13	18	18	---	---	---	---	---
All Other States	35	37	37	37	36	123	132	193	120	181	4	4	6	4	5
% of U.S.	29	29	26	27	27	23	24	33	20	24	---	---	---	---	---
United States	125	129	135	134	132	537	559	576	606	737	4	4	4	5	6

1/ Estimates developed by ERS mainly from Census data and trade directories. 2/ Reported by Bureau of the Census. 3/ Preliminary.
(D) Withheld to avoid disclosing figures for individual companies. (N.A.) Not available.

CAPACITY TO EXPAND MORE THAN CRUSH IN 1970/71

Soybean crushings for the current marketing year started September 1 are forecast around 775 million bushels, up modestly from the 1969/70 record of 737 million but sharply about 2 years ago when the crush totaled 606 million bushels. The prospective record grind reflects a continuing strong demand for soybean oil and meal both at home and abroad.

The processing industry in the first part of the 1970-71 season probably is running near capacity levels. The October-December crush is estimated at around 200 million bushels compared with 187 million in the same quarter of 1969. Thereafter, the crush rate may diminish slightly while capacity increases, resulting in a more customary relationship of crush to capacity. For the entire 1970/71 season the processing industry probably will run at about 85% to 90% of potential capacity. While this exceeds the long-run average of about 80%, it trails the 1969/70 rate of about 95%.

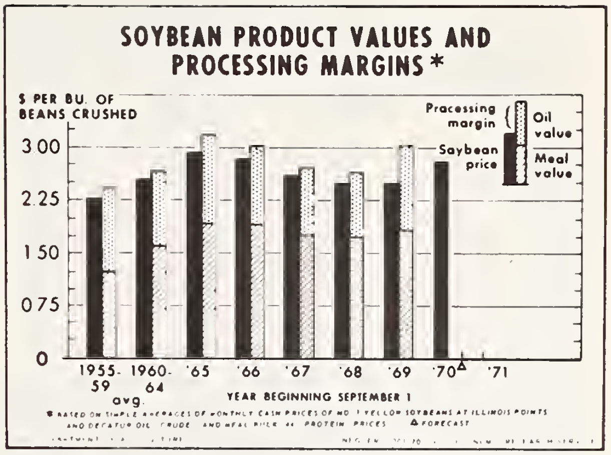
PROCESSING MARGINS VARY WIDELY

The total value of products obtained from a bushel of soybeans will vary widely from mill to mill depending upon product yields and also the transportation and market conditions relating to the sale of products. The price the processor pays for soybean varies considerably according to location and size of the mill and buying practices of the processor. These conditions result in wide fluctuations in annual processing margins.

During the 1960's, the annual average processing margin (based on spot prices) varied between 5 cents per bushel in 1963/64 and 48 cents in 1969/70. The average for the decade was 16 cents. However, with the exception of 1965 and 1969, the annual margin was 15 cents or less. Generally low processing margins reflect excess crushing capacity due to the construction of large solvent extraction mills along with the growth of horizontally integrated processing (mixed-feed manufacturing and vegetable oil refining).

The relationship between soybean prices, processing margins, and soybean product prices is complex because oil and meal demands are largely unrelated, yet they are produced simultaneously in nearly fixed proportions. Because of the dynamic nature of soybean markets, product prices are constantly changing. At times meal and oil prices rise and fall together in response to changing soybean prices. At other times, movements in soybean product prices are in opposite directions and may occur with little or no change in soybean prices.

The following calculation shows the relationships between spot product values, soybean prices, and the gross crushing margin for the 1969/70 marketing year ended August 31, per bushel of soybeans crushed:



* BASED ON SIMPLE AVERAGES OF MONTHLY CASH PRICES OF NO. 1 YELLOW SOYBEANS AT ILLINOIS POINTS AND DECATUR OIL (CRUDE) AND MEAL (BULK 44% PROTEIN) PRICES   Δ FORECAST

Figure 4

Item	Dollars
Oil value: 10.66 lbs. oil[1] at 11.0 cents[2]	1.17
Meal value: 47.36 lbs. meal[1] at 3.89 cents[2]	1.84
Total value of products	3.01
Minus: Soybean price paid by processors[3]	2.53
Processing margin (gross)	0.48

[1] Actual outturns of oil and meal as calculated from Census crushings report.

[2] Simple average of monthly cash prices using the following quotations: Soybean oil, crude, tank cars, Decatur, Ill.; soybean meal, bulk, 44% protein, Decatur, Ill.

[3] Simple average of monthly cash prices of No. 1 yellow soybeans, Illinois points.

Spot processing margins are calculated on the basis of 44% protein soybean meal, but about half the U.S. soybean processors are equipped to produce 49% or 50% protein meal.[2]

In recent years, the market price of 49% or 50% protein meal at Decatur, Ill., averaged about $7 to $8 per ton more than the 44% product. Obviously a processor producing the higher protein meal should have a slightly better spot margin than the producer of 44% meal.

The incentive to crush is an important factor affecting annual processing margins. When the demand for soybean products is greater than production and soybean supplies are adequate, products sell high in relation to soybeans and this creates a strong crushing incentive. On the other hand, if demand for one or both products is not optimistic or if soybeans are in short supply, the soybean-product relationship likely will

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[2] The 49% or 50% protein meal is produced by not returning to the meal the soybean hulls that were removed before processing. The extent to which hulls are added back to the meal after processing depends upon the protein guarantee the crusher is trying to achieve.

Table 29.--Estimated number of soybean oil mills and processing capacity in the United States, 1960-70

Year beginning September	Processing mills 1/	Annual processing capacity: Total 2/	Utilized 3/	Excess 4/	Ratio of utilized to total	Average per mill: Processing capacity	Capacity utilized 3/
	Number	Mil. bu.	Mil. bu.	Mil. bu.	Percent	Mil. bu.	Mil. bu.
1960	125	525	406	119	77	4.2	3.2
1961	131	(535)	431	104	81	4.1	3.3
1962	130	550	473	77	86	4.2	3.6
1963	132	575	437	138	76	4.4	3.3
1964	125	585	479	106	82	4.7	3.8
1965	125	600	537	63	89	4.8	4.3
1966	129	650	559	91	86	5.0	4.3
1967	135	750	576	174	77	5.5	4.3
1968	134	750	606	144	81	5.6	4.5
1969	132	770	737	33	96	5.8	5.6
1970 5/	130	6/825	775			6.3	6.0

1/ Estimates developed by ERS from Census data and trade directories. Includes cottonseed and other oilseed mills that process significant quantities of soybeans. 2/ Trade estimates 1958 to date (except 1961). Data in brackets are USDA interpolations. 3/ Soybeans actually crushed. 4/ Difference between total capacity and soybeans utilized (crushed). 5/ Forecast. 6/ Current estimate of annual capacity this fall. Capacity is expected to expand to nearly 900 million bushels in spring of 1971. Estimates shown here are approximations of capacity at the beginning of the marketing year. Capacity fluctuates during any year due to new plants coming into operation and additions to existing mills, some mills becoming dormant (due to explosions, fires, strikes, etc.) and dismantling of older mills.

Table 30.--Soybeans: Annual value of products per bushel of soybeans processed and spot price spread, 1960-70

Year beginning September	Value of products per bushel: Soybean oil: Yield 1/	Price 2/	Value	Soybean meal: Yield 1/	Price 2/	Value	Total value	Soybean price: Received by farmers 3/	No. 1 yellow, Illinois points 4/	Spread between value of products and soybean price: Received by farmers	No. 1 yellow, Illinois points
	Pounds	Cents	Dollars	Pounds	Cents	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1960	10.99	11.2	1.23	46.97	3.00	1.41	2.64	2.13	2.53	.51	.11
1961	10.92	9.7	1.06	47.11	3.11	1.47	2.53	2.28	2.41	.25	.12
1962	10.74	8.8	.94	46.94	3.57	1.67	2.61	2.34	2.50	.27	.12
1963	10.92	8.4	.92	48.02	3.58	1.72	2.64	2.51	2.59	.13	.05
1964	10.89	11.2	1.22	47.77	3.48	1.66	2.88	2.62	2.81	.26	.07
1965	10.69	11.8	1.26	47.53	4.02	1.91	3.17	2.54	2.91	.63	.26
1966	10.70	10.4	1.11	47.66	3.98	1.90	3.01	2.75	2.86	.26	.15
1967	10.57	8.6	.91	47.71	3.82	1.82	2.73	2.49	2.61	.24	.12
1968	10.61	8.2	.87	47.43	3.76	1.78	2.66	2.43	2.54	.23	.12
1969 5/	10.65	11.0	1.17	47.35	3.89	1.84	3.01	2.44	2.53	.57	.48
1970 6/	10.68	13.0	1.39	47.46	3.96	1.88	3.27	2.72	2.82	.55	.45

1/ Actual outturns of oil and meal as calculated from Bureau of the Census reports. 2/ Simple average of monthly cash prices per pound using the following quotations: Soybean oil, crude, tank cars, f.o.b. Decatur, Ill; soybean meal, bulk, 44% protein, Decatur, Ill. 3/ Season average price received by farmers weighted by the estimated percent of the crop sold each month. 4/ Simple average of monthly prices. 5/ Preliminary. 6/ September-October average.

Table 31.--Soybeans: Monthly average spot price spread between soybean prices and values of soybean oil and meal per bushel of soybeans processed, 1960-70 1/

Year beginning September	September	October	November	December	January	February	March	April	May	June	July	August	Annual average
	--Cents per bushel--												
1960	21	13	10	15	10	11	6	4	1	6	16	20	11
1961	30	14	13	15	14	7	8	7	6	6	6	17	12
1962	43	17	15	9	9	10	7	2	3	7	10	10	12
1963	1	8	5	2	2	1	1	0	3	8	13	6	5
1964	14	16	15	9	1	2	5	0	-4	-1	8	19	7
1965	45	51	51	27	36	27	9	11	9	13	15	25	26
1966	33	23	12	18	15	16	12	8	6	10	9	22	15
1967	32	11	12	7	8	14	11	7	6	9	13	16	12
1968	36	29	12	1	-1	4	9	4	5	7	6	22	12
1969	37	61	45	56	59	77	53	50	25	24	39	48	48
1970	47	43											

1/ Spot spreads are calculated from simple average monthly cash prices using the following quotations: Soybean prices, No. 1 yellow, Illinois Points; soybean oil, crude, tank cars, f.o.b. Decatur, Ill.; soybean meal, bulk, 44% protein, Decatur Ill. These data do not reflect actual operating margins since prices are simple averages and do not take into account location differentials or actual purchases and sales of soybeans, soybean oil and soybean meal.

reduce the incentive to crush. There have been years of favorable processing margins at high soybean prices (expansion incentive), and years of small margins (contraction incentive) at low soybean prices. Processors attempt to "put on" or "fix" as much crush as possible when margins are favorable (through use of futures), and as little as possible when margins are unsatisfactory.

PROCESSING MARGINS MAY DECLINE SLIGHTLY IN 1970/71

During the current marketing year, spot processing margins probably will average somewhat below the 48 cents level of 1969/70 but above the 16 cents average during 1960-69. Limited supplies of soybeans at higher prices along with the sharp increase in crushing capacity will tend to reduce margins.

The processing margin this September-October averaged 45 cents per bushel compared with about 50 cents the same 2 months in 1969 and 33 cents in 1968. When processing margins are favorable early in the season (such as the current year) many processors are able to "hedge in" their margins and this encourages sustained heavy crushings and insures a profitable year's operation.

SEASONALITY IN PROCESSING MARGINS

Fluctuations in prices of soybeans and soybean products during the season result in wide variations in processing margins. But they show a definite seasonal pattern. Processing margins (based on spot market prices) are usually seasonally high in September and hold up through the heavy harvest after which they decline to a seasonal low in May.

In 8 of the past 10 years (1960-69) the season's high in spot processing margins occurred in the September-November quarter. Soybean prices in September usually are heavily discounted by the forthcoming new crop, but soybean oil and meal prices are relatively strong since their production is at the low point of the year. During harvest the margins stays wide due to the selling pressure of new-crop soybeans on the market. But after harvest, as soybean prices recover relative to product prices, the processing margin declines until it typically reaches the lowest level in May. During 8 of the past 10 years the season's low occurred during the March-May quarter. After May the margin usually takes an upturn coincident with the lowering trend of soybean prices.

Monthly processing margins in 1969/70 did not conform to the usual seasonal pattern. The spot margin generally increased from 37 cents per bushel in September to a high of 77 cents in February, then declined to 24 cents in June before turning up again. Both the peak quarter (December-February) and the low quarter (June-August) occurred later than usual. The sharp advance in meal and oil prices largely occurred after the crop harvest, and soybean prices did not rise significantly until later in the marketing year.

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Table 32.--Domestic disappearance of food and nonfood fats and oils, by end products, total and per person, year beginning October by quarters, with comparisons, 1967 to date

Year and Quarter	Unit	Food							Nonfood				All products (fat content)
		Butter (actual weight)	Margarine (actual weight)	Lard (direct)	Baking and frying fats (shortening)	Salad and cooking oils	Other edible 1/	Total (fat content)	Soap 2/	Drying oils 3/	Other 4/	Total	
1967-68													
Oct.-Dec:													
Total	Mil.lb.	305	549	262	828	615	117	2,509	106	236	986	1,328	3,837
Per person	Lb.	1.5	2.7	1.3	4.1	3.1	.6	12.4	.5	1.2	5.0	6.7	19.2
Jan.-Mar:													
Total	Mil.lb.	311	566	281	811	654	117	2,571	197	185	929	1,311	3,882
Per person	Lb.	1.6	2.8	1.4	4.0	3.3	.6	12.8	1.0	.9	4.6	6.5	19.4
Apr.-June													
Total	Mil.lb.	285	493	282	771	700	130	2,506	211	192	932	1,334	3,840
Per person	Lb.	1.4	2.5	1.4	3.8	3.5	.6	12.5	1.0	1.0	4.6	6.6	19.1
July-Sept:													
Total	Mil.lb.	272	508	260	823	677	117	2,501	190	256	928	1,374	3,876
Per person	Lb.	1.3	2.5	1.3	4.1	3.4	.6	12.4	.9	1.3	4.6	6.8	19.2
Season:													
Total	Mil.lb.	1,172	2,116	1,085	3,233	2,645	482	10,087	703	869	3,775	5,348	15,435
Per person	Lb.	5.8	10.5	5.4	16.1	13.2	2.4	50.3	3.5	4.3	18.8	26.6	76.9
1968-69 5/													
Oct.-Dec:													
Total	Mil.lb.	321	575	285	859	679	123	2,671	106	228	990	1,324	3,995
Per person	Lb.	1.6	2.8	1.4	4.3	3.4	.6	13.2	.5	1.1	4.9	6.6	19.8
Jan.-Mar:													
Total	Mil.lb.	305	561	238	852	682	117	2,586	189	201	961	1,351	3,937
Per person	Lb.	1.5	2.8	1.2	4.2	3.4	.6	12.8	.9	1.0	4.7	6.7	19.4
Apr.-June:													
Total	Mil.lb.	243	502	231	814	788	121	2,550	197	210	991	1,397	3,947
Per person	Lb.	1.2	2.5	1.1	4.0	3.9	.6	12.6	1.0	1.0	4.9	6.9	19.4
July-Sept:													
Total	Mil.lb.	278	512	291	842	683	111	2,561	200	213	985	1,398	3,959
Per person	Lb.	1.4	2.5	1.4	4.1	3.4	.5	12.6	1.0	1.0	4.8	6.9	19.5
Season:													
Total	Mil.lb.	1,148	2,150	1,045	3,368	2,833	472	10,368	691	852	3,926	5,470	15,838
Per person	Lb.	5.7	10.6	5.2	16.6	14.0	2.3	51.1	3.4	4.2	19.5	27.0	78.1
1969-70 5/													
Oct.-Dec:													
Total	Mil.lb.	306	592	253	943	732	126	2,773	103	157	1,101	1,356	4,133
Per person	Lb.	1.5	2.9	1.2	4.6	3.6	.6	13.6	.5	.8	5.4	6.6	20.2
Jan.-Mar:													
Total	Mil.lb.	295	583	235	923	774	124	2,764	184	160	878	1,212	3,985
Per person	Lb.	1.4	2.8	1.1	4.5	3.8	.6	13.5	.9	.8	4.3	5.9	19.5
Apr.-June:													
Total	Mil.lb.	244	496	251	842	791	126	2,603	193	163	922	1,276	3,882
Per person	Lb.	1.2	2.4	1.2	4.1	3.9	.6	12.1	.9	.8	4.5	6.2	18.9
July-Sept:													
Total	Mil.lb.	258	539	188	885	766	109	2,625	187	182	1,085	1,453	4,078
Per person	Lb.	1.3	2.6	.9	4.3	3.7	.5	12.8	.9	.9	5.3	7.1	19.8
Season:													
Total	Mil.lb.	1,103	2,209	928	3,593	3,063	485	10,763	667	644	3,986	5,314	16,077
Per person	Lb.	5.4	10.8	4.5	17.5	15.0	2.4	52.6	3.3	3.1	19.5	25.9	78.5

1/ Includes all food fats and oils used other than butter, lard, margarine, shortening and cooking and salad oils.

2/ Fat equivalent of soap used in synthetic rubber is included in "other industrial products". Adjusted for foreign trade and changes in stocks.

3/ Paints, varnishes, floor coverings, oilcloth, printing inks, core oils, synthetic resins, insulation, linings, packings, coated fabrics, caulking and other protective coatings.

4/ Includes use of fats and oils in chemicals, lubricants and greases, animal feeds, fatty acids, tin and terne plate, pharmaceuticals, leather, candles, synthetic organic detergents, toilet articles, and miscellaneous industrial products.

5/ Preliminary.

Table 33.--Fats and oils (including their products) and oilmeals: Production from domestic and imported materials, and factory and warehouse stocks at end of month

Item	Production						Stocks			
	October-September		1969	1970			1969	1970		
	1968-69	1969-70	Sept.	July	Aug.	Sept.	Sept. 30	July 31	Aug. 31	Sept. 30
PRIMARY FATS AND OILS					Million pounds					
Food fats and oils										
Butter (creamery)	1,132.8	1,121.3	67.7	92.5	81.1	72.8	155.3	203.5	199.2	171.3
Lard (commercial)	1,941.0	1,810.4	163.0	140.0	143.5	166.4	55.8	66.5	54.2	59.7
Beef fats	526.0	577.9	45.3	41.9	44.3	50.1	25.6	35.2	29.3	37.0
Total edible animal fats	3,599.8	3,509.6	276.0	274.4	268.9	289.3	236.7	305.2	282.7	268.0
Corn oil	467.1	474.3	39.2	38.5	37.4	34.0	70.7	68.1	63.5	60.0
Cottonseed oil	1,450.3	1,251.4	51.0	33.1	26.6	31.2	376.8	213.9	158.1	121.8
Palm oil	---	---	---	---	---	---	28.3	36.4	26.5	19.6
Peanut oil	199.2	179.6	7.2	10.5	5.5	6.7	17.1	25.3	17.3	11.6
Soybean oil	6,530.8	7,904.2	511.8	664.7	655.6	563.5	415.4	638.3	670.6	543.4
Safflower oil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	61.0	16.7	22.2	29.1
Total edible vegetable oils	8,647.4	9,809.5	609.2	746.8	725.1	635.4	969.3	998.7	958.2	785.5
Soap fats and oils										
Tallow, inedible, and greases	4,601.0	4,830.1	383.2	410.6	389.6	419.1	303.6	333.7	325.0	368.6
Fish and marine oil 1/	182.2	199.5	28.9	40.0	39.0	27.4	131.4	127.8	147.9	109.8
Coconut oil	376.4	196.6	35.8	D	D	D	131.4	114.0	123.8	145.5
Total soap fats	5,159.6	5,226.2	447.9	450.6	428.6	446.5	566.4	575.5	596.7	623.9
Drying oils										
Castor oil 1/	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	112.4	121.0	123.9	116.5
Linseed oil	304.7	306.8	39.5	17.5	29.1	36.2	118.8	112.8	117.1	130.1
Tall oil	1,294.5	1,242.5	100.1	93.2	96.2	92.3	190.1	176.3	155.1	136.2
Tung oil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	56.7	45.8	45.7	46.1
Total drying oils	1,599.2	1,549.3	139.6	110.7	125.3	128.5	478.0	455.9	441.8	428.9
Grand total	19,006.1	20,094.5	1,472.9	1,582.5	1,547.9	1,499.7	2,250.4	2,335.3	2,279.4	2,106.3
From domestic materials	18,629.7	19,897.9	1,437.1	1,582.5	1,547.9	1,499.7				
From imported materials	376.4	196.6	35.8	D	D	D				
FAT-AND-OIL PRODUCTS										
Cooking and salad oils										
Total	3,047.9	3,335.9	254.3	279.2	268.3	268.6	60.2	99.7	87.3	68.5
Soybean	2,146.7	2,382.8	184.5	207.0	198.9	194.2	42.0	77.4	67.4	50.5
Other	901.2	953.1	69.8	72.2	69.5	74.4	18.2	22.2	19.9	18.0
Baking and frying fats (shortening)										
Total	3,396.9	3,639.3	294.5	256.9	308.2	298.3	116.3	150.1	139.9	127.1
100% vegetable oil	2,205.6	2,473.6	199.9	168.4	207.3	196.6	83.4	110.1	106.1	94.8
100% animal fats or blends of vegetable oil and animal fats	1,191.3	1,165.7	94.6	88.6	101.0	101.7	32.9	40.1	33.8	32.3
Margarine										
Total	2,161.8	2,222.0	187.2	169.7	166.8	189.9	50.1	59.4	55.9	50.3
Soft	326.9	408.2	34.4	29.8	32.9	34.8	---	---	---	---
1 pound units	1,915.4	1,968.6	165.5	149.8	147.4	162.5	---	---	---	---
All other	246.4	253.4	21.7	19.8	19.4	27.4	---	---	---	---
Fatty Acids	1,137.7	1,114.7	93.2	80.2	96.0	92.0	130.9	124.4	120.2	124.1
Glycerine (Natural and synthetic)	360.6	341.0	33.0	23.8	26.5	24.9	58.0	50.4	49.1	48.6
Meat Meal and Tankage	4,036.3	4,020.7	347.5	345.5	329.7	359.5	---	---	---	---
OILSEED CAKE AND MEAL						Thousand tons				
Soybean (including hull meal)	14,580.7	17,592.3	1,134.0	1,490.4	1,474.5	1,268.8	156.8	164.3	207.0	136.6
Cottonseed	2,029.0	1,785.7	74.9	46.6	38.0	44.7	64.9	98.0	65.1	39.1
Linseed	267.4	273.3	35.5	16.3	26.1	32.9	8.3	19.1	19.4	17.2
Peanut	134.3	121.1	4.9	7.0	3.6	5.5	2.4	3.9	1.4	1.1
Copra	110.3	57.5	10.6	D	D	D	.9	D	D	D
Other	69.7	62.1	13.5	D	D	10.8	19.7	5.9	12.8	15.2
Total oilmeals	17,191.4	19,892.0	1,273.4	1,560.3	1,542.2	1,362.7	253.0	291.2	305.7	209.2

1/ Stocks include GSA stockpile.

N.A.— Not available. D - Census disclosure.

Table 34.--Imports and exports of fats, oils, oil-bearing materials, fat-and-oil products (in terms of oil) and oilmeals

Item	Imports for consumption					Exports 1/				
	Oct.-Sept.		1970			Oct.-Sept.		1970		
	1968-69	1969-70	July	Aug.	Sept.	1968-69	1969-70	July	Aug.	Sept.
	Million pounds									
Food fats and oils										
Butter	2.2	2.4	2/	2/	.2	30.0	1.9	.1	2/	.1
Lard	2/	---	---	---	---	223.0	349.3	38.0	37.2	27.9
Beef fats	.2	.4	2/	2/	2/	12.7	21.1	.5	3.8	3.7
Total, edible animal fats	2.4	2.8	2/	2/	.2	265.7	372.3	38.6	41.0	31.7
Corn oil	7.9	3.1	1.7	---	---	10.0	10.5	.4	1.8	1.8
Cottonseed oil	2/	.1	---	---	---	139.1	451.4	17.5	8.9	17.8
Cottonseed (17 percent)	---	---	---	---	---	1.3	9.0	1.6	.6	.6
Olive oil, edible	58.1	62.7	4.9	4.4	5.8	---	---	---	---	---
Palm oil	161.2	121.8	13.5	6.8	6.2	---	---	---	---	---
Peanut oil	2/	2/	---	2/	---	27.6	33.9	2.4	.1	.1
Peanuts, shelled (43.5 percent)	---	---	---	---	---	9.4	12.5	.2	.3	.3
Soybean oil	2/	---	---	---	---	869.6	1,419.1	151.4	143.2	166.3
Soybeans (18.3 percent)	2/	2/	---	2/	---	3,150.4	4,894.6	277.7	319.4	325.4
Safflower seed (36 percent)	---	---	---	---	---	52.0	45.4	1.1	4.0	17.5
Other vegetable oils	19.6	22.1	1.9	1.3	1.0	6.6	7.9	.6	.7	.5
Total, edible vegetable oils	246.8	209.8	22.0	12.5	13.0	4,266.0	6,884.3	452.9	479.0	530.3
Soap fats and oils										
Tallow, inedible	4.1	7.4	.6	.4	.7	1,883.0	1,862.0	173.3	132.9	132.1
Greases	2/	2/	2/	---	---	124.2	187.8	12.7	12.8	13.4
Fish and fish liver oils non-medicinal	.5	.3	.1	2/	---	172.3	211.4	30.6	31.5	41.7
Marine mammal oils	57.9	46.9	3.3	5.5	.1	---	---	---	---	---
Olive oil, inedible	.3	.4	2/	.1	---	---	---	---	---	---
Total, slow-lathering oils	62.8	55.0	4.0	6.0	.8	2,179.5	2,261.2	216.6	177.2	187.2
Babassu oil	5.7	6.3	---	---	---	---	---	---	---	---
Coconut oil	438.2	551.2	47.6	46.9	27.0	8.4	9.0	.2	3.2	.8
Copra (64 percent)	399.6	301.1	26.2	25.3	54.0	---	---	---	---	---
Palm kernel oil	104.5	79.8	6.4	5.8	4.2	---	---	---	---	---
Total, lauric-acid oils	948.0	938.4	80.2	78.0	85.2	8.4	9.0	.2	3.2	.8
Drying oils										
Flaxseed (36.1 percent)	2/	2/	---	---	---	157.8	116.0	21.8	2/	3.6
Linseed oil	2/	2/	---	---	2/	49.6	44.8	1.3	3.1	2.7
Oiticica oil	10.1	5.2	1.1	2/	---	---	---	---	---	---
Tall oil	---	---	---	---	---	104.6	162.1	10.4	16.3	9.2
Tung oil	17.8	18.9	---	3.2	1.6	1.7	2.2	.1	.1	.2
Total	27.9	24.1	1.1	3.2	1.6	313.7	325.1	33.6	19.5	15.7
Other industrial oils and fats										
Castor oil	137.0	129.0	6.8	5.1	6.0	---	---	---	---	---
Fish-liver oils, medicinal	9.3	8.9	.9	.4	.5	---	---	---	---	---
Rapeseed oil	10.4	7.9	2/	1.8	.9	---	---	---	---	---
Wool grease	4.6	7.3	.5	.8	.7	---	---	---	---	---
Other vegetable oils and fats, inedible	12.4	11.3	.6	.6	.4	69.4	89.0	5.2	8.0	9.2
Total	173.7	164.4	8.8	8.7	8.5	69.4	89.0	5.2	8.0	9.2
Products										
Margarine (fat content)	---	---	---	---	---	3.2	3.4	.1	.1	.1
Shortening	---	---	---	---	---	27.9	23.9	1.5	1.2	1.4
Salad products (fat content)	---	---	---	---	---	8.2	8.7	.7	.7	.6
Soap (fat content)	2.3	2.6	.1	.2	.3	13.7	11.5	1.0	1.0	1.1
Fatty acids	16.7	8.1	.2	.6	.2	76.9	115.0	6.6	12.4	7.7
Total	19.0	10.7	.3	.8	.5	129.9	162.5	9.9	15.4	10.9
Grand total	1,480.8	1,405.1	116.6	109.2	109.9	7,232.8	10,103.6	756.7	743.2	785.6
Glycerine	1.2	.3	2/	---	---	46.5	73.2	6.1	7.7	3.0
Oilseed Cake and Meal:	Thousand tons									
Soybean	---	---	---	---	---	3,044.3	4,035.6	407.1	289.0	282.9
Cottonseed	29.4	1.1	---	---	---	15.0	18.8	.8	12.6	.1
Linseed	1.7	2.0	.2	.1	.1	78.4	83.5	2.4	8.6	18.3
Copra	---	---	---	---	---	---	---	---	---	---
Corn	---	---	---	---	---	2.8	3.3	.1	.1	.5
Other	4.0	6.6	.1	2.9	---	58.3	47.2	4.4	4.8	2.7
Total oilmeals	35.1	9.7	.3	3.0	.1	3,198.8	4,188.4	414.8	315.1	304.5

1/ Includes re-exports and foreign donations but not shipments to U.S. Territories. 2/ Less than 50,000 pounds.

Table 35.--Index numbers of wholesale prices of fats and oils

Item	1957-59=100				
	September		1970		
	1968	1969	July	August	September
All fats and oils	86	102	112	116	112
All fats and oils, except butter	70	92	104	110	104
Grouped by origin:					
Animal fats	90	114	118	122	119
Vegetable oils, domestic	78	80	102	109	103
Vegetable oils, foreign	98	105	128	125	127
Grouped by use:					
Butter	114	116	118	118	120
Butter, seasonally adjusted	112	113	126	124	117
Lard	54	95	103	109	109
Lard, refined	88	120	123	128	124
Food fats other than butter	71	84	103	110	106
Food fats other than butter and lard	77	81	103	110	106
All edible fats and oils	92	100	112	116	114
Soap fats	67	102	107	111	103
Drying oils	80	82	89	93	89
Other industrial	76	95	106	107	104
All industrial	70	102	107	111	103
Edible vegetable oils, grouped by degree of processing:					
Crude	78	80	103	110	104
Refined	96	85	104	108	105
End products	101	102	113	114	114
Margarine	100	101	114	114	114
Shortening, 3 lb. tin	94	94	108	108	108
Shortening, 400 lb. drum	106	107	112	117	117

All indexes except "Butter, seasonally adjusted" and "Other industrial" from Bureau of Labor Statistics.

Table 36.--Prices received by farmers and prices at terminal markets for specified oil-bearing materials and oilmeals

Item	Unit	October		1970		
		1968	1969	August	September	October
		Dollars	Dollars	Dollars	Dollars	Dollars
OILSEEDS						
Copra, Philippines, c.i.f. Pacific Coast	Short ton	165.60	184.80	---	---	---
Cottonseed, United States average	Short ton	50.50	40.20	50.00	51.10	56.00
Flaxseed, No. 1, Minneapolis	Bushel	3.07	2.77	2.65	2.64	2.60
Flaxseed, United States average	Bushel	2.81	2.64	2.46	2.36	2.31
Peanuts, United States average (farmers' stock)	100 lb.	12.10	12.40	12.20	12.90	13.20
Peanuts, Virginias' No. 1, shelled, Va.-N.C. 1/	100 lb.	21.12	21.75	21.38	21.88	21.25
Peanuts, Runners No. 1, shelled, Southeast 1/	100 lb.	20.80	21.88	22.00	22.00	21.62
Peanuts, Spanish No. 1, shelled, Southeast 1/	100 lb.	20.38	21.50	22.12	21.50	21.38
Peanuts, Spanish No. 1, shelled, Southwest 1/	100 lb.	20.38	21.75	22.00	22.00	21.88
Soybeans, No. 1, Yellow, Chicago	Bushel	2.46	2.38	2.79	2.81	2.90
Soybeans, No. 1, Yellow, Illinois country shipping points	Bushel	2.32	2.30	2.75	2.75	2.90
Soybeans, United States average	Bushel	2.32	2.23	2.65	2.66	2.77
OILMEALS (bulk)						
Copra meal, 20 percent protein, Los Angeles	Short ton	80.00	74.00	80.00	80.00	80.00
Cottonseed meal, 41 percent protein, Memphis	Short ton	66.20	63.40	2/82.00	2/74.50	72.60
Cottonseed meal, 41 percent protein, Chicago	Short ton	76.60	72.40	92.60	87.60	83.40
Cottonseed meal, 41 percent protein, Atlanta	Short ton	66.60	62.20	85.40	81.60	76.60
Cottonseed meal, 41 percent protein, Ft. Worth	Short ton	71.00	69.30	85.00	85.30	82.50
Fish meal, 60 percent protein, bagged, New York	Short ton	129.20	193.40	174.50	175.00	188.10
Fish meal, 60 percent protein, bagged, Los Angeles	Short ton	132.00	168.80	170.25	163.50	157.50
Linseed meal, 34 percent protein, Minneapolis	Short ton	72.00	65.00	62.75	61.80	65.10
Linseed meal, 34 percent protein, New York	Short ton	92.40	86.00	84.75	82.70	84.00
Peanut meal, 50 percent protein, f.o.b. Southeastern mills	Short ton	87.30	76.00	90.75	97.00	83.60
Safflower meal, 20 percent solvent, San Francisco	Short ton	31.80	35.00	41.75	42.00	42.50
Soybean meal, 44 percent protein, Chicago	Short ton	82.50	79.90	89.20	86.00	82.40
Soybean meal, 44 percent protein, Decatur	Short ton	78.20	75.40	84.00	81.20	77.25
Soybean meal, 44 percent protein, Atlanta	Short ton	86.80	82.10	92.20	88.30	86.30
Soybean meal, 44 percent protein, Memphis	Short ton	83.90	76.60	85.40	83.60	80.10
Soybean meal, 50 percent protein, Decatur 3/	Short ton	85.30	82.10	92.50	88.20	83.75
Soybean meal, 50 percent protein, Memphis 3/	Short ton	88.60	84.70	97.40	93.30	88.75
Soybean meal, 50 percent protein, Atlanta 3/	Short ton	94.70	90.50	102.00	98.70	94.20

1/ This price applies to peanuts for edible uses. 2/ Based on one week's data. No quotations available for other weeks. 3/ Beginning February 1968, quoted as 49-50 percent protein.

Compiled from Oil, Paint, and Drug Reporter, Wall Street Journal, Chicago edition, reports of the Statistical Reporting Services, and the Consumer Marketing Service.

Table 37.--Wholesale and retail prices per pound for fats and oils

Item	October		1970		
	1968	1969	August	September	October
	Cents	Cents	Cents	Cents	Cents
Wholesale Prices:					
Butter, creamery, Grade A, (92-score) bulk, New York	69.3	69.0	70.9	71.3	71.3
Butter, creamery, Grade A, (92-score) bulk, Chicago	67.3	68.2	69.8	70.5	70.1
Butter, creamery, Grade A, (92-score) prints, San Francisco	80.8	82.3	85.3	86.3	85.8
Castor oil, dehydrated, tanks, New York	30.5	28.0	28.0	28.0	28.0
Castor oil, No. 1, Brazilian, tanks, imported, New York	18.7	14.8	15.5	15.8	18.0
Castor oil, No. 1, tanks, f.o.b., New Jersey mills	---	---	---	---	---
Coconut oil, crude, tank cars, Pacific Coast, 1/	12.8	14.0	15.9	16.5	16.2
Coconut oil, crude, tanks, f.o.b. New York	11.9	14.8	16.9	16.5	16.7
Coconut oil, refined, tanks, l.c.l., New York	15.2	15.8	18.2	18.4	18.0
Cod oil, spot, drums, New York	8.1	8.0	8.2	8.2	8.5
Codliver oil, medicinal, U. S. P., barrels, New York	19.5	19.5	20.8	20.8	21.1
Corn oil, crude, tank cars, f.o.b. Midwest mills	14.8	13.7	15.5	16.0	17.8
Corn oil, crude, tanks, New York	14.6	13.5	15.6	16.4	18.6
Corn oil, refined, tanks, New York	18.2	15.8	18.7	19.2	21.4
Cottonseed oil, crude, tank cars, f.o.b., S. E. mills	10.5	10.2	14.1	12.9	13.4
Cottonseed oil, crude, tank cars, f.o.b., Valley	10.4	10.2	13.6	12.5	13.6
Cottonseed oil, crude, tank cars, f.o.b., Texas	10.6	10.0	13.5	12.4	13.3
Cottonseed oil, p.s.y., bleachable, tank cars, New York 2/	12.2	---	---	---	---
Cottonseed oil, refined, tanks, New York	15.5	14.8	17.6	16.5	17.6
Degras, Lanolin technical, drums, New York	22.0	22.0	33.0	33.0	37.0
Glycerine, soaplye, tanks, New York 3/	16.2	---	---	---	---
Grease, A white, tank cars, delivered Chicago	5.2	7.9	8.6	6.5	8.4
Grease, B white, delivered, Chicago	4.4	7.0	7.8	7.0	7.8
Grease, yellow, delivered, Chicago	4.0	6.7	8.1	7.5	7.0
Grease, white, choice, tanks, New York	4.8	5.0	8.5	8.1	8.4
Grease oil, extra No. 1, drums, Chicago	13.5	13.4	13.4	13.4	13.4
Lard, loose, tank cars, Chicago	6.6	11.6	11.5	11.5	11.8
Lard, prime steam, tierces, Chicago	6.7	11.8	12.0	11.6	12.1
Lard, refined, one and two pound prints, Chicago	12.5	17.1	17.0	16.4	16.3
Lard, refined, carlots, 50-lb. tins, Chicago	9.2	14.4	14.5	14.0	14.6
Linseed oil, raw, tank cars, Minneapolis	11.9	11.9	11.0	10.0	10.0
Linseed oil, raw, tanks, New York	13.2	13.1	12.3	11.3	11.3
Margarine, colored, delivered, Eastern U.S.	25.6	26.5	29.0	29.0	29.4
Margarine, yellow, quarters, f.o.b., Chicago	25.0	19.6	20.8	20.8	20.8
Margarine, white, domestic vegetable, Chicago	22.0	18.3	19.5	19.5	19.5
Menhaden oil, crude, tanks, f.o.b., Baltimore	4.5	4.5	N.A.	N.A.	N.A.
Menhaden oil, light pressed, tanks, New York	9.5	9.5	10.5	10.5	10.5
Neat's foot oil, 30°, drums, carlots, New York	---	---	---	---	---
Oiticica oil, drums, f.o.b., New York	11.5	18.0	18.0	18.0	18.0
Oiticica oil, tanks, New York	9.6	16.0	16.0	16.1	16.0
Oleo oil, extra, drums, Chicago	---	---	---	---	---
Olive oil, imported, edible, drums, New York	38.7	38.7	40.7	39.3	39.3
Palm oil, clarified, drums, f.o.b., New York	14.5	12.5	17.2	17.2	16.5
Palm oil, Congo, tank cars, f.o.b., New York	12.0	11.2	14.0	14.0	13.2
Palm kernel oil, bulk, c.i.f., New York	---	---	---	---	---
Peanut oil, crude, tank cars, f.o.b. S. E. mills	12.2	14.2	16.0	16.1	16.9
Peanut oil, refined, tanks, New York	15.0	17.2	18.9	19.2	19.8
Rapeseed oil, refined (denatured), tanks, New York	13.8	13.8	17.0	17.0	17.0
Safflower oil, tanks, New York	15.6	15.6	16.5	16.5	16.5
Safflower oil, edible, drums, New York	22.8	22.8	27.0	27.0	27.0
Sesame oil, refined, drums, New York	35.0	35.0	39.0	39.0	39.0
Shortening, all vegetable, hydrogenated, 440-lb. drums, New York	19.8	22.2	23.2	23.2	25.2
Shortening, all vegetable, hydrogenated, 3 lb. tins, delivered, Eastern U.S.	25.1	25.8	29.6	29.6	30.0
Soybean oil, crude, tank cars, f.o.b., Decatur	7.3	10.6	11.6	12.1	14.0
Soybean oil, refined, tanks, New York	9.3	12.4	13.5	13.8	15.9
Soybean oil, clarified, tanks, New York	9.2	10.3	13.6	14.4	16.4
Sperm oil, natural 45°, drums, New York	14.5	16.0	23.0	24.5	26.0
Sperm oil, bleached, winter 45°, drums, New York	17.5	17.0	24.0	24.0	27.0
Tall oil, crude, tanks, works	3.4	3.4	3.5	3.5	3.5
Tall oil, refined, tanks, works	7.5	7.5	8.5	8.5	8.5
Tallow, edible, loose, Chicago	7.1	11.6	12.3	12.8	11.8
Tallow, inedible, packers' prime, c.a.f. delivered, Chicago	4.6	7.3	8.2	7.7	8.3
Tallow, inedible, bleachable fancy, delivered, Chicago	4.9	7.7	8.7	8.2	8.8
Tallow, No. 1, inedible, delivered, Chicago	4.1	6.7	7.4	6.6	7.3
Tallow, special, inedible, tanks, delivered, New York	4.3	7.2	8.0	7.6	8.0
Tung oil, imported, drums, f.o.b., New York	14.8	19.4	26.0	26.0	26.0
Tung oil, tanks, New York	10.5	17.5	22.5	22.5	21.3
Tung oil, domestic, tanks, f.o.b. mills	4/24.0	4/24.0	4/24.0	4/24.0	4/24.0
Retail prices 5/					
Butter	83.8	85.8	87.0	86.9	87.3
Margarine	27.7	27.7	30.1	30.2	30.6
Shortening	27.8	27.5	30.0	30.0	N.A.
Salad Dressing (Italian)	74.8	75.6	76.8	77.4	78.0
Peanut Butter	58.9	62.3	63.9	64.5	N.A.
Cooking and Salad oils	35.2	34.6	38.6	38.6	38.8

1/ Includes 1 cent import duty.

2/ Nearby futures.

3/ Average of weekly prices, New York Journal of Commerce.

4/ Nominal.

5/ Leading cities.
N.A.- Not available.

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